

CHELMSFORD  
RURAL DISTRICT COUNCIL

---

Annual Report

OF THE

**MEDICAL OFFICER of HEALTH**

(JOHN F. MACDONALD, M.D., D.P.H.)

(Barrister-at-Law)

FOR

**1946.**

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SOUTHEND :

W. H. Houldershaw, Ltd., Printers, 49-55, London Road,

1947.



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## INDEX

	Page(s)
Ambulance Facilities ... ..	12-14
British Restaurants ... ..	12
Clinics and Treatment Centres ... ..	14, 15
Committees ... ..	9, 10
Dairies and Cowsheds ... ..	29, 31, 34
Diabetes Treatment ... ..	12
Diphtheria Immunisation ... ..	44, 46, 47
Drainage and Sewerage ... ..	25, 61-63
Food Inspection ... ..	31, 41
Health Services in Area ... ..	9-15
Hospitals ... ..	10-13, 59
Housing ... ..	34-40, 48, 64, 65
Infectious Diseases ... ..	42-47, 57-59
Knaecker's Yard ... ..	29
Laboratory Facilities ... ..	10
Maternity and Child Welfare ... ..	10-12, 14-15
Meat Inspection ... ..	31, 41
Milk Supply ... ..	31, 41
Midwives ... ..	10
Mortuaries ... ..	14
Petroleum Licences ... ..	49-50
Public Cleansing ... ..	25-30, 63-64
Public Health Staff ... ..	4
Review of Public Health ... ..	53-65
Revision of Acreage ... ..	51-54
Rivers and Streams ... ..	25
Rural Housing Survey ... ..	39, 40
Sanitary Inspection of Area ... ..	30-34
Scabies Treatment ... ..	44
Slaughterhouses ... ..	29
Statistics and Social Conditions ... ..	5-8, 48, 56-57
Swimming Pools ... ..	34
Town Planning ... ..	42
Water Supply ... ..	16-24, 60-61

**London Road,  
Chelmsford.**

*2nd July, 1947.*

*To the Chairman and Members of the Chelmsford Rural District  
Council.*

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present for your consideration the Annual Report on the health and sanitary circumstances of your District during the year 1946.

The Death rate for the year per 1,000 population was 11.2 compared with 10.7 for 1945, and the Birth rate was 19.7 compared with 17.5 for the previous year.

The number of cases of infectious diseases was not above the average.

Owing to the scarcity of labour and materials, progress in providing houses has not been so rapid as anticipated.

No extensions of sewers and sewage purification works have been undertaken. These are urgently required in some parts of the District.

Further extensions to watermains have been approved by the Ministry of Health.

The extension of the Public Cleansing service throughout the District has been approved.

To my colleagues I am much indebted for valuable assistance, and to Mr. Denton Ogden for helping in the preparation of this report.

For the sympathetic consideration and assistance received during the year, I beg to thank the Council.

I am,

Your obedient Servant,

**JOHN F. MACDONALD.**

## STAFF.

---

*Clerk to the Rural District Council* : H. H. Gowers.

*Deputy Clerk to the Rural District Council* : C. R. Pluntree.

*Financial Officer to the Rural District Council* : M. W. Butcher.

## PUBLIC HEALTH DEPARTMENT.

*Medical Officer of Health* : John F. Maedonald, M.D., D.P.H.  
(also Medical Officer of Health for the Rural Districts of Maldon and Rochford).

*Clerk to Medical Officer of Health* : W. D. Hall.

M. C. Barton resigned in 1947.

## CHIEF SANITARY INSPECTOR'S DEPARTMENT.

*Chief Sanitary Inspector and Petroleum Inspector* :\*

A. Denton Ogden, M.B.E., F.R.San.I., F.S.I.A.

*Sanitary Inspectors* :—\*

T. H. C. Bartrop, M.R.San.I., M.S.I.A.,

C. F. Allard, M.S.I.A., M.R.I.P.H.H.

*Assistant to Chief Sanitary Inspector* : L. W. Eekersley,  
A.R.San.I., M.S.I.A.

*Clerk-Assistant* : F. B. Brewster.

*Clerk* : R. H. Hawkes, (returned to duty from H.M. Forces,  
Oct., 1946).

I. G. Warren, (called up for service in H.M. Forces, September,  
1946).

\*Qualified Inspectors of Meat and other Foods, Royal Sanitary Institute.

## ENGINEER'S DEPARTMENT.

*Engineer and Surveyor* : W. E. Bunker, M.Inst., M. & CyE.,  
M.R.San.I.

*Assistant Engineer and Surveyor* : D. C. Pinder.

## HOUSING ESTATES DEPARTMENT.

*Estate Surveyor and Ambulance Officer* : E. Ollett.

# CHELMSFORD RURAL DISTRICT

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## STATISTICS AND SOCIAL CONDITIONS OF THE AREA

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Area (acres)            ...        ...    86,590 (land and inland waters.)

Population (estimated, 1945)    35,190

Population, 1931 (census)        27,836 (13,628 males; 14,208 females).

Number of families or  
separate occupiers (1931)    7,441

Number of houses on 31st  
December, 1946            ...    10,530

The rateable value of the district for the half-year commencing—  
1st April, 1946, was £193,268 10s. 0d.

The sum represented by a penny rate, year ended  
31st March, 1946            ...        ...        ...        £783 18 2

### Social Conditions.

A large proportion of the adult population of the district is employed in the agricultural industry. A number residing in the parishes adjacent to the Borough of Chelmsford are employed in works in the Borough.

### EXTRACTS FROM VITAL STATISTICS OF THE YEAR

		Total	Male	Female	
Live Births	{ Legitimate ...	656	342	314	Birth-rate (R.G.) 19.7
	{ Illegitimate ...	37	24	13	
Still Births	{ Legitimate ...	14	6	8	Rate per 1,000 births
	{ Illegitimate ...	—	—	—	
Deaths	... ..	396	190	206	Death-rate (R.G.) 11.2

Deaths from puerperal causes :—

From Puerperal and post-abortive sepsis	...	...	1
Other Maternal causes	...	...	Nil.

Number of deaths of infants under 1 year of age :—

Males, 10 (9 legitimate); females, 6 (all legitimate).  
(1 Illegitimate).

Death-rate of infants under 1 year of age :—

All infants per 1,000 live births	...	...	23
Legitimate infants per 1,000 legitimate live births	...	...	23
Illegitimate infants per 1,000 illegitimate live births	...	...	30

Deaths from Cancer (all ages) ... .. 60

Deaths from Measles (all ages) ... .. Nil.

Deaths from Whooping Cough (all ages) ... .. 1

Deaths from Diarrhoea (under 2 years of age) ... .. 1

### Comparative Table of Birth and Death Rates During the Year, 1946.

	Rate per 1,000 Resident Population		Deaths under one year per 1,000 regis- tered live births
	Live Births	Deaths from all causes	
England and Wales ... ..	19.1	11.5	43
126 County Boroughs and Great Towns, including London ...	22.2	12.7	45
148 Smaller Towns with resident population of from 25,000 to 50,000 at 1931 Census... ..	21.3	11.7	37
Chelmsford Rural District ...	19.7	11.2	23

The deaths classified according to age were as follows :—

					Number of Deaths			
					Occurring in district	Of non- residents occurring in district	Of residents occurring outside district	Allotted to district
Under 1 year ... ..					6	2	12	16
1 and under 2 ... ..					1	1	—	—
2 " " 5 ... ..					—	—	1	1
5 " " 15 ... ..					2	—	2	4
15 " " 25 ... ..					8	5	3	6
25 " " 35 ... ..					7	5	5	7
35 " " 45 ... ..					10	6	6	10
45 " " 55 ... ..					22	5	11	28
55 " " 65 ... ..					35	10	23	48
65 " " 75 ... ..					105	36	28	97
75 and over ... ..					159	27	47	179
Totals ... ..					355	97	138	396

Natural increase of population, namely, the excess in the number of live births over the number of deaths, since 1937 is shown in the following tabular statement.

Year	Number of		Deaths	Increase	
	Births				
1937	... 460	... 370	... 90		
1938	... 485	... 340	... 145		
1939	... 497	... 357	... 140		
1940	... 518	... 419	... 99		
1941	... 478	... 416	... 62		
1942	... 600	... 372	... 228		
1943	... 584	... 387	... 197		
1944	... 670	... 427	... 243		
1945	... 586	... 358	... 228		
1946	... 693	... 396	... 297		

The following table classifies the deaths according to cause and sex—

Cause of Death	Males	Females	Total
Typhoid and Paratyphoid Fevers	—	—	—
Measles ... ..	—	—	—
Scarlet Fever ... ..	—	—	—
Whooping Cough ... ..	1	—	1
Diphtheria ... ..	—	—	—
Influenza ... ..	3	2	5
Ac. Poliomyelitis & Polioencephalitis	—	—	—
Acute Inf. Encephalitis ... ..	—	—	—
Cerebro Spinal Fever ... ..	—	—	—
Tuberculosis of respiratory system	3	3	6
Other tuberculosis ... ..	—	1	1
Syphilitic Diseases... ..	—	—	—
Cancer ... ..	26	34	60
Diabetes ... ..	—	2	2
Intra-cranial vascular lesions ...	20	30	50
Heart disease ... ..	56	57	113
Other circulatory diseases ... ..	5	8	13
Bronchitis ... ..	11	7	18
Pneumonia (all forms) ... ..	10	7	17
Other respiratory diseases ... ..	2	2	4
Ulcer of stomach and duodenum	2	3	5
Diarrhoea (under 2 years) ... ..	1	—	1
Appendicitis ... ..	—	—	—
Other digestive diseases ... ..	7	4	11
Nephritis ... ..	3	4	7
Puerperal and post Abortive Sepsis	—	1	1
Other Maternal Causes ... ..	—	—	—
Malformation, etc. ... ..	7	4	11
Premature Birth ... ..	—	1	1
Suicide ... ..	7	3	10
Road traffic accidents ... ..	3	2	5
Other violent causes ... ..	4	2	6
All other causes ... ..	19	29	48
TOTALS ... ..	190	206	396

## GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

The Rural District Council consists of 36 elected members and meets monthly. There are several Committees dealing with Public Health matters, each of which meets on the 3rd Tuesday of each month. The Committees' reports are presented at the following Council Meeting—4th Tuesday in each month. The Minutes of the Council are printed and distributed to members.

### LIST OF COMMITTEES.

General Purposes and Staffing.

Finance.

Buildings and Planning.

Public Health.

Housing.

Re-Housing.

Slum Clearance.

Estates Management.

Drainage and Water.

Rating and Valuation.

Fuel and Lighting Advisory.

Catering.

Community Centres.

The Council is represented on the :—

Chelmsford Area Assessment Committee.

Chelmsford Joint Sewerage Committee.

Chelmsford Joint Hospital Board.

South-East Essex Superannuation Joint Committee.

South-East Essex United Districts (Medical Officer of Health) Committee.

Chelmsford Area Guardians Committee.

Road Safety Joint Committee.

Traffic Committee

Ministry of Labour Employment Committee.

Mid-Essex Regional Planning Committee.

Chelmsford and District Tuberculosis After Care Association.

Rural District Council's Association (Essex Branch).

Chelmsford and District Youth Committee.

Essex County Branch Rural District Councils Association.

Divisional Education Committee.

**Midwives.** None is subsidised by the District Council. There were 13 midwives practising in the district at the end of 1946. In addition one midwife was in private practice.

### **Laboratory Facilities.**

These services are provided by the County Council.

### **Hospitals provided or subsidised by the Sanitary Authority or by the County Council:—**

(1) Tuberculosis Institutions are provided by the Essex County Council.

(2) Maternity Hospital. Hospital treatment is provided by the County Council by arrangement with certain hospitals for the following types of patients:—

- (i) Complicated or difficult cases of confinement where hospital treatment is essential. (St. John's Hospital, Chelmsford; Municipal Hospital, Rochford; Colchester Borough Maternity Home).
- (ii) Patients who, after confinement, are found to be suffering from Puerperal Pyrexia. (Colchester, Rush-Green, Romford, Waltham Abbey, and Billericay Isolation Hospitals).
- (iii) Pregnant women for whom hospital treatment is necessary.

(3) Hospital for Children. Arrangements are made by the Essex County Council for the reception of infants suffering from Ophthalmia Neonatorum, at Rush Green Hospital, Romford, and Oldechurch County Hospital, Romford. Where, for some particular reason, the infant cannot be admitted to Hospital, the County Council has an arrangement with the Essex County Nursing Association for the provision of a trained nurse at the patient's home.

### **Treatment of Orthopaedic patients.\***

Ascertainment clinics are held at Coval Lane, Chelmsford approximately once a quarter.

Arrangements are made for children seen at the Ascertainment Clinic to be admitted to The Lodge Hospital, Orsett, or Runwell Emergency Hospital, Wickford, or Oldechurch County Hospital, Romford.

After-treatment clinics are held at Chelmsford on 2nd, 3rd, and 4th Monday commencing at 2 p.m.

Arrangements have been made by the Essex Education Committee for operative treatment for the removal of Adenoids and enlarged Tonsils at Chelmsford and Essex Hospital, Chelmsford; St. John's Hospital, Chelmsford; Essex County Hospital, Colchester; and St. Andrew's Hospital, Billericay.

(4) Fever hospital accommodation is provided for both the Borough and the Rural District by the Chelmsford Joint Hospital Board. The Hospital for ordinary infectious diseases situated in Great Baddow consists of an administrative block, a 14-bed pavilion, a 7-bed pavilion, an 18-bed asbestos pavilion, and the necessary out-houses (wash-house, laundry, disinfecter, mortuary, etc.)

(5) A Small-pox Hospital is provided by the Essex County Council. For this purpose the County Council has entered into an agreement with the Borough of Colchester for the provision of Hospital treatment, including ambulance services, for small-pox cases.

(6) A General Hospital (Voluntary) situated in the Borough of Chelmsford serves the whole of the Rural District.

There is provision provided at certain Social Welfare Institutions for unmarried mothers, illegitimate infants, and homeless children in the district, and suitable cases can be admitted to the Hostel for mothers and babies at Ardmere, Buckhurst Hill.

**Registered Nursing Homes.** These are administered by the Essex County Council. There are 3 in the district.

**Diabetic Treatment.** During the year, Insulin has been supplied free of cost to 5 diabetic persons for whom no other public provision was made. As from the "appointed day" under the National Health Service Act, 1946, the District Council will not be responsible for this free issue.

**British Restaurants.** During the war, the District Council inaugurated two British Restaurants—one in Great Baddow and one in Writtle. These are still functioning and, during the last twelve months, provided the following meals:—

	Great Baddow	Writtle
Main meals supplied to the public ...	37,759	47,722
Main meals supplied to schools ...	66,841	39,537

The schools supplied are:—Great Baddow, Galleywood, Danbury, Sandon, Chignal, Roxwell, Writtle, and Heathcote Private School, Danbury.

**Ambulance Facilities.** (a) For infectious diseases there is a motor ambulance which is housed at the Isolation Hospital in Great Baddow.

(b) For non-infectious and accident cases there are two modern motor ambulances, both Buick, one 30 h.p., and the other 32 h.p. These are both directly controlled by the Rural District Council and are both garaged at the Council Offices, New London Road, Chelmsford. The staff is part time. The caretaker of the Council Offices acts as driver, clerks on the Council staff act as attendants, a driver mechanic in a garage near the Offices is retained as a second driver, and a lady acts as voluntary attendant when desirable, such as maternity cases, etc. She resides opposite the Council Offices and is on the telephone. There is also an Ambulance Officer. All calls are made to the Council Offices, and day and night services are provided. Doctors, nurses and police, etc., have the telephone number and have details of the arrangements.

The following table shows the amount charged for conveyance by ambulance from or to the various parishes in the Rural District to or from St. Johns or Chelmsford & Essex Hospital. The charge is calculated at the rate of 1/6d. per road mile from the Council Offices to a centre of the populace in the parish or part of the Parish enumerated and return, the minimum charge being 7/6d. and the maximum charge £1 0s. 0d.

<i>Parish</i>			<i>Charge</i>		
			£	s.	d.
Great Baddow	...	...		7	6
Little Baddow	...	...	1	0	0
Bicknaere	...	...	1	0	0
Boreham	...	...	13	6	
Broomfield	...	...	9	0	
Chignal St. James	...	...	9	0	
Chignal Smealey	...	...	13	6	
Danbury	...	...	15	9	
Downham	...	...	1	0	0
Ford End	...	...	1	0	0
Galleywood	...	...	9	0	
Good Easter	...	...	1	0	0
East Hanningfield	...	...	16	6	
South Hanningfield	...	...	1	0	0
West Hanningfield	...	...	18	0	
Highwood	...	...	15	0	
Ingatestone	...	...	1	0	0
Great Leighs	...	...	1	0	0
Little Leighs	...	...	1	0	0
Margaretting	...	...	12	0	
Mashbury	...	...	16	6	
Mountnessing	...	...	1	0	0
North End	...	...	1	0	0
Pleshey	...	...	1	0	0
Ramsden Heath	...	...	1	0	0
Rettendon	...	...	1	0	0
Roxwell	...	...	13	6	
Runwell	...	...	1	0	0
Sandon	...	...	10	6	
Springfield	...	...	7	6	
Stock	...	...	16	6	
Great Waltham	...	...	15	0	
Little Waltham	...	...	13	6	

<i>Parish</i>				<i>Charge</i>		
				£	s.	d.
North Woodham	...	...	...	1	0	0
South Woodham	...	...	...	1	0	0
Writtle ...	...	...	...		9	0

The charge for taking cases outside the District, *i.e.* to one of the London Hospitals is for first journey 1/6d. per mile (including return journey), for second and subsequent journeys for the same case, £1 to boundary of District and 9d. per mile (including return journey), back to boundary of District.

The cost to the rates for these services amounted to £130 for year 1946/47, and the estimated cost for 1947/48 is £148.

The ambulance service is authorised by Section 197 of the Public Health Act, 1946. This section is repealed by the National Health Service Act, 1946, therefore after the appointed day relating to this Act (5th July 1948) the Rural District Council ceases to have legal authority to continue the ambulance services. These services, from that date, will be undertaken by the County Council and charges will not be recoverable from the users of the service.

During the year 1st April, 1946, to 31st March, 1947, there were 456 calls answered. The mileage (outward and inward) covered by these calls totalled 6,720 miles equal to an average of approximately 12 miles per call.

**Mortuaries.** There is a mortuary for infectious cases at the Isolation Hospital, Great Baddow.

Arrangements have been made with the Chelmsford General Hospital for the housing of bodies from the District and the housing of bodies removed by order of a coroner.

**Obstetric Specialist.** Services available for consultations with medical practitioners and at clinics.

**Clinics, Treatment Centres, and Paediatric Specialist.** These are provided by the Essex County Council as given in the following tabular statement:—

## MATERNITY AND CHILD WELFARE CENTRES.

Centre	Address	Sessions (Monthly)
Roxwell ... ..	Church Hall ... ..	2nd Thursday, 2 p.m.
Highwood ... ..	Iron Room ... ..	3rd Wednesday, 2 p.m.
Good Easter ... ..	Parish Hall ... ..	Last Thursday, 2.15 p.m.
Ford End ... ..	Village Hall ... ..	Last Friday, 2 p.m.
Downham ... ..	Women's Institute Hall	1st Friday, 2.30 p.m.
Danbury ... ..	Village Hall ... ..	1st & 3rd Thursdays, 2 p.m.
Broomfield ... ..	Church Room ... ..	1st Thursday, 2.30 p.m. & 3rd Thursday. No Doctor.
Galleywood ... ..	Methodist Chapel ... ..	3rd Tuesday, 2 p.m.
Writtle ... ..	Iron Room ... ..	4th Tuesday, 2.30 p.m.
Rettendon... ..	Village Hall ... ..	3rd Wednesday, 2 p.m.
Ingatstone ... ..	Workmen's Institute ... ..	2nd and 4th Fridays, 2.30 p.m.
Great Baddow ... ..	Parish Hall ... ..	2nd and 4th Thursdays, 2 p.m.
Little Waltham... ..	Chapel School Room ... ..	1st Tuesday, 2.30 p.m.
Stoek ... ..	Congregational Schoolroom	3rd Thursday, 2 p.m.
Woodham Ferrers	Congregational Schoolroom	2nd Monday, 2 p.m.
Boreham ... ..	Village Hall ... ..	2nd Tuesday, 2 p.m.
Boreham Aerod'me	Hut 16, Site 2. ... ..	1st & 3rd Mondays, 2 p.m.
Chignal Smealey...	Congregational Church Room	3rd Friday, 2 p.m.

## ANTE-NATAL CLINIC.

Chelmsford and Essex Hospital, London Road, Chelmsford, Tuesdays,  
2.30 p.m.

Rettendon, Village Hall, 1st Wednesday, 10 a.m.

Women's Welfare Clinic, 5, Market Road, Chelmsford, 4th Friday, 10 a.m.

## TUBERCULOSIS DISPENSARY.

Address :  
Essex County Council Hospital  
Broomfield, Chelmsford.

Hours of Session :  
Mondays and Wednesdays,  
10—12 noon.

## VENEREAL DISEASES.

Treatment is available at the Chelmsford and Essex Hospital, London  
Road, Chelmsford, and at Essex County Hospital, Colchester.

## OPHTHALMIC CLINIC.

Coval Lane, Chelmsford, Thursdays, 10 a.m.  
5, Market Road, Chelmsford, 2nd & 3rd Tuesdays, 2 p.m.

## DENTAL CLINIC.

5, Market Road, Chelmsford, 2nd & 3rd Tuesdays, 2 p.m.  
Coval Lane,                   "                   "                   "

### WATER SUPPLY.

By the end of 1946, a piped water supply under pressure was available throughout the district for 80 per cent of the houses—of these over 78 per cent had the water into or 'on to' the house. This leaves 22 per cent of the houses in the district without a piped main water supply. Details, classified according to parish, are given in the table on page 17.

If the proposed main extensions submitted to the Ministry of Health for approval are carried out, a further 4 per cent of the houses in the district will have a piped main water supply available—leaving 18 per cent still unprovided. Details of the proposed extensions are given on page 20.

The following table includes living huts on Government Airfields and Sites. It also gives effect to the transfer of properties under the County of Essex (Rural Parishes) Confirmation Order of 1946. The table does not include any new houses which may be occupied or in the course of erection but are not yet in the Valuation List.

Parish	Number of Houses						
	Total	With Water Laid on	With Communal Standpipe	With Meter Supply		Without Piped Water Supply	
				Domestic	Domestic and Trade		Trade
Great Baddow SPA	1,489	1,450	—	19	9	34	11
” ” OSPA	358	273	6	5	12	24	63
Little Baddow	285	224	—	10	5	6	46
Boreham	402	197	—	4	3	21	198
Broomfield	507	437	—	3	4	14	63
Chignall	126	58	15	—	3	16	50
Danbury	712	629	—	14	16	25	53
Good Easter	117	63	—	1	12	1	41
East Hanningfield	115	83	—	1	17	15	14
South Hanningfield	411	308	—	4	5	6	94
West Hanningfield	186	78	—	—	12	10	96
Ingatstone	722	582	22	32	16	38	70
Great Leighs	330	70	—	2	5	3	253
Little Leighs	65	23	—	1	1	2	40
Margaretting	199	134	12	3	10	20	40
Mashbury	41	12	—	—	2	—	27
Mountnessing	266	169	—	—	—	—	97
Pleshey	80	34	—	—	1	1	46
Rettendon	255	218	1	7	18	24	11
Roxwell	256	92	10	3	10	5	131
Runwell	405	334	7	2	7	11	55
Sandon	237	184	1	5	12	18	35
Springfield	125	63	2	—	3	8	57
Stock	342	199	8	5	13	21	137
Great Waltham	553	264	23	4	14	14	248
Little Waltham	307	172	2	2	13	10	118
Woodham Ferris	635	549	—	6	29	24	49
Writtle SPA	783	667	—	1	18	39	97
Writtle OSPA	221	100	14	—	14	17	93
TOTALS	10,530	7,666	123	134	274	417	2,333*

\* A number of these properties are on the line of main but are not yet connected

During the year 321,262,000 gallons of water were supplied throughout the District, as shewn in the following table.

WATER CONSUMPTION (IN GALLONS) DURING 1946.

Area	Council's Waterworks	South Essex Waterworks Company	Southend Waterworks Company	Total
Great Baddow ...	—	84,293,000	—	84,293,000
Broomfield ... ..	8,868 0 00	—	—	8,868,000
Danbury ... ..	—	88,870,000	—	88,870,000
Ingatestone, Margaret- ting, Writtle and West Hanningfield...	—	41,949,000	—	41,949,000
Northern ... ..	—	79,200,000	—	79,200,000
Stock ... ..	—	4,666,000	—	4,666,000
Mountnessing ... ..	—	—	5,180,000	5,180,000
South Hanningfield ...	—	—	8,090,000	8,090,000
Woodham Ferrers ...	—	—	146,000	146,000
	8,868,000	298,978,000	13,416,000	321,262,000

From the above tabular statement it will be seen that of the water supplied by the Council, 298,978,000 gallons were purchased from the South Essex Waterworks Company, the only areas supplied from local waterworks being part of Broomfield from the Broomfield Works, and two farms from Great Baddow Water Works.

*Properties Connected to the Water Mains during 1946.*

	Existing Houses	New Houses	Domestic and Trade	Trade	Existing Houses on Domestic Supply to which Meters have been inserted	Total
Great Baddow (including Galleywood) ...	1	85	1	3	2	92
Little Baddow ...	1	10	—	1	—	12
Boreham ...	6	2	—	2	—	10
Broomfield ...	—	5	—	1	—	6
Chignall ...	3	—	1	1	1	6
Danbury ...	—	1	—	4	2	7
Good Easter ...	4	—	1	—	—	5
East Hanningfield ...	2	—	—	—	—	2
South Hanningfield ...	1	2	—	—	—	3
West Hanningfield ...	2	—	—	—	—	2
Ingatestone & Fryerning ...	7	4	—	1	1	13
Great Leighs ...	6	—	—	—	—	6
Little Leighs ...	—	—	1	—	—	1
Margaretting ...	3	12	—	6	—	21
Mashbury ...	—	—	—	—	—	—
Mountnessing ...	—	—	—	—	—	—
Pleshey ...	—	—	—	—	—	—
Rettendon ...	1	6	—	1	—	8
Roxwell ...	5	—	1	—	—	6
Runwell ...	2	22	—	2	—	26
Sandon ...	—	8	1	—	—	9
Springfield ...	—	—	—	2	—	2
Stock ...	4	1	—	3	—	8
Great Waltham ...	33	—	1	1	—	35
Little Waltham ...	9	—	4	—	—	13
Woodham Ferrers ...	—	5	1	1	1	8
Writtle ...	7	42	2	5	1	57
	97	205	14	34	8	358

**PROPOSED WATER MAIN EXTENSIONS**

PREPARED BY THE ENGINEER AND SURVEYOR, APPROVED BY THE DISTRICT COUNCIL, AND SUBMITTED TO THE MINISTRY OF HEALTH FOR SANCTION.

A comprehensive post-war scheme has been proposed which will bring the main water supply to a further 360 existing properties and meter supplies to a possible 76 premises. The details of the scheme are given in the following table:—

Parish	No. of Properties to be served	Length of Main (Yds.)		
		3"	4"	Total
Baddow, Great ...	32	880	3,025	3,905
Baddow, Little ...	7	—	1,323	1,323
Boreham ...	9	—	960	960
Broomfield ...	6	—	1,350	1,350
Chignal ...	22	5,844	—	5,844
Danbury ...	—*	155	—	155
Good Easter ...	15	120	2,713	2,833
Hanningfield, East ...	10	—	3,240	3,240
Hanningfield, West ...	19	—	2,083	2,083
Ingatestone ...	25	580	4,051	4,631
Leighs, Great ...	31	811	2,807	3,618
Leighs, Little ...	13	1,558	—	1,558
Margaretting ...	3	—	117	117
Pleshey ...	6	598	—	598
Rettendon ...	4	—	5,046	5,046
Roxwell ...	25	2,519	1,184	3,703
Sandon ...	2	—	680	680
Springfield ...	8	—	587	587
Stock ...	38	590	3,067	4,407†
Waltham, Great ...	115	4,723	4,350	9,073
Waltham, Little ...	6	657	—	657
Woodham Ferrers ...	10	1,487	—	1,487
Writtle ...	30	240	2,630	2,870
Total ...	436	20,762	39,213	60,725

\* The short extension at Danbury is to connect two existing water mains

† The proposed extension at Stock includes 750 yards of 5" mains.

The principal grounds on which this proposed scheme has been based are :—

- (a) to link existing main supplies to include properties having a poor local supply ;
- (b) to extend mains to serve areas where local supplies are precarious ; and
- (c) to further co-ordination with the schemes of neighbouring Local Authorities.

After consultation with the Ministry of Health, and having regard to the shortage of labour and materials, etc., the following sections of the scheme have now been postponed for the time being :—

<i>Parish</i>	<i>Estimated Cost</i>	<i>Length of 4" Main in yds.</i>
Little Baddow ...	£1,350	1,323
Ingatestone ...	£1,220	1,507
Ingatestone ...	£480	657
Ingatestone ...	£1,480	1,887
Stock ...	£1,015	1,184
	£3,180	4051

The total cost of the scheme is estimated at £44,212. The Ministry of Health is giving a grant of £20,000 towards the cost of the extension, and the Essex County Council an annual payment equivalent to a capital grant of £14,737, which is one third of the estimated cost.

The District Council has certain statutory rights by which water can be procured from the mains of the Chelmsford Corporation (Chelmsford Corporation Water Act, 1923), Southend Waterworks Company (Southend Waterworks Act, 1924), and South Essex Waterworks Company (South Essex Waterworks Act, 1928).

# **SOUTH ESSEX WATERWORKS COMPANY**

RECENT ANALYSIS OF SAMPLES OF WATER PUMPED FROM  
THE WORKS AT LANGHAM AND LAYER-DE-LA-HAYE.

(CHEMICAL RESULTS IN PARTS PER MILLION)

	Langham	Layer-de-la-Haye
Appearance ... ..	Clear and bright	Clear and bright
Colour A.P.H.A. ... ..	10	10
Turbidity, silica scale ...	Nil	Nil
Odour ... ..	Nil	Nil
Taste ... ..	Nil	Nil
Electric Conductivity 20°C.	740	520
Total solids 180°C. ... ..	493	347
Reaction P.H. ... ..	8.0	7.9
"Free Chlorine" ... ..	0.53	0.27
Chlorides as Cl. ... ..	36	36
Total Oxidised Nitrogen ...	3.5	1.0
Nitrites as N ... ..	Nil	Nil
Hardness, Permanent ... ..	125	80
"    Temporary ... ..	275	140
"    Total ... ..	400	220
Free Ammonia ... ..	0.28	0.18
Albuminoid Ammonia ... ..	0.09	0.19
Oxygen absorbed 4hrs. 27°C.	1.10	1.60
Metals ... ..	Nil	Nil
Colony Count per m.l. on		
Agar 1 day at 37°C. ... ..	19	3
Ditto 3 days at 20°C. ...	35	12
Presumptive coli absent in ...	100 m.l.	100 ml.
Bact. Coli absent in ... ..	100 ml.	100 ml.
Cl. Welchii Present in ... ..	10 ml.	100 ml.
Absent in ... ..	1 ml	10 ml.

From the figures given it is seen that over 95% of the water supplied to consumers (by the District Council) is provided by South-Essex Waterworks Company from the two Waterworks—the Langham and Layer-de-la-Haye Works.

The water leaving the two works is examined daily (except Sunday) bacteriologically and in every instance the Bact. Coli is absent in 100 ml. The Laboratory at Langham deals with over 3,000 chemical, bacteriological, and biological examinations per year.

The difference of hardness between the water at Layer-de-la-Haye and Langham is rather striking and the reduction of hardness at the latter station is mainly attributable to the prolonged storage in the Abberton Reservoir; its contents when completely filled are 5,700 million gallons. Approximately 8 million gallons are pumped daily from the Layer works, and 10 million gallons daily from the works at Langham.

(These observations were supplied by the Company).

*Copy of a Recent Analysis From The Southend Waterworks Company's Mains.*

	Chemical Results in parts per Million
Appearance	... Bright
Colour	... Normal
Odour	... Nil.
Reaction pH.	... Faint Alkaline 9.3
Free Carbonic Acid	... Nil.
Electric Conductivity at 20° C.	... 500
Total Solids, dried at 180° C.	... 335
Chlorine in Chlorides	... 40
Nitrogen in Nitrates	... 4.6
Nitrites	... 0.1
Hardness : Temporary	... 20
Permanent	... 135
Total	... 155
Alkalinity as Calcium Carbonate	... 20
Metals	... Iron less than 0.03
Free Ammonia	... 0.31
Ammoniacal Nitrogen	... —
Albuminoid Ammonia	... 0.066
Albuminoid Nitrogen	... —
Oxygen absorbed in 4 hrs. at 27° C....	1.20
Free Chlorine reaction	... 0.1

Bacteriological Results

No. of Bacteria growing on Agar per cc. or ml. in 1 day at 37°C.	0
"                    "                    "                    cc. or ml. in 2 days at 37°C.	0
"                    "                    "                    cc. or ml. in 3 days at 20°C.	0
The Bacillus Coli	... Present in —. Absent in 100 c.e.
Bacillus Welchii	... Present in 100 c.e. Absent in 100 c.e.
(B. Enteriditis Sporogenes).	

COPY OF A RECENT ANALYSIS OF A SAMPLE OF WATER  
FROM THE BROOMFIELD WATERWORKS, 13,3.46.

		Chemical Results in parts per 100,000	
Appearance	...	Clear and bright	
Colour	...	Normal	
Odour	...	Nil.	
Reaction pH.	...	Faint alkaline :	8.3
Free Carbonic Acid	...	Absent	
Electric Conductivity at 20°C.	...	1600	
Total Solids, dried at 180°C.	...	107.0	
Chlorine in Chlorides	...	32.0	
Alkalinity as Calcium Carbonate	...	36.5	
Hardness : Total	...	1.0	
Temporary	...	1.0	
Permanent	...	0.0	
Nitrogen in Nitrates	...	0.00	
Nitrogen in Nitrites	...	Approx. 0.001	
Free Ammonia	...	0.036	
Ammoniacal Nitrogen	...	—	
Albuminoid Ammonia	...	0.0002	
Albuminoid Nitrogen	...	—	
Oxygen absorbed in 4 hrs at 27°C....		0.020	
Metals	...	Iron :	0.006
Other metals	...	Absent	
' Free chlorine reaction '	...	0.25 part per million	
Bacteriological Results			
No. of Bacteria growing on Agar per cc. or ml. in 1 day at 37°C.		0	
"                    "                    "		cc. or ml. in 2 days at 37°C.	1
"                    "                    "		cc. or ml. in 3 days at 37°C.	—
Presumptive Coliform			
Reaction	...	Present in —.	Absent in 100 cc.
Bacillus Coli	...	Present in —.	Absent in 100 cc.
Bacillus Welchii	...	Present in —.	Absent in —. —

REPORT.—This sample is clear and bright in appearance, very faintly alkaline in reaction and free from metals apart from a negligible trace of iron. The water has a high content of salinity and mineral constituents in solution but the amounts are not excessive. It is soft in character and of very satisfactory organic and bacterial purity.

The results are consistent with a wholesome water suitable for drinking and domestic purposes.

## RIVERS AND STREAMS.

The district is drained by the Chelmer and its tributaries. Pollution from agricultural lands is bound to occur.

## DRAINAGE AND SEWERAGE.

Sewers are available in the parishes of Broomfield, Great Baddow, Ingatestone, Mountnessing, Runwell, and Writtle.

The number of houses connected to the sewers at end of 1946 was :—

Broomfield	...	...	...	...	451
Great Baddow	...	...	...	...	1314
Ingatestone	...	...	...	...	515
Mountnessing	...	...	...	...	142
Runwell	...	...	...	...	153
Writtle	...	...	...	...	615
					Total
					3190

During the year, further consideration was given to the provision of major sewerage schemes but no work has yet been put in hand.

## PUBLIC CLEANSING

The need for a refuse collection scheme which would include every parish in the District has for some time been much to the fore, but, until this year, it had not been possible to consider any extension of the curtailed war-time service. This has been due to the labour shortage and to the difficulty of obtaining the necessary extra vehicles.

Requests for the extension of the existing service have come from various Parish Councils and from individual rate-payers. There is a growing demand for such a service—a demand heightened by the presence of the town-dweller, who, through the exigencies of the war, has become a country-dweller. He has had to leave all the town services and amenities behind, and does not always appreciate the difficulties involved in providing these in a rural area.

It is now proposed to extend the present area of collection. The preliminary work on the survey and planning for the scheme has been completed, and roads and lanes bordered by over 10,000 houses have been surveyed. Some houses have had to be left out of the scheme as they are either too isolated or on totally unmade roads. Maps showing every route of collection, and detailed route charts have also been prepared.

The refuse collection vehicles at present in use are a 10 cubic yard Dennis, purchased in 1943, and used for refuse collection and salvage, and a 7 cubic yard Shelvoke and Drewry, purchased in 1934, and now used mainly for salvage collection. Two new 11.3 cubic yard Shelvoke and Drewry vehicles were ordered in June, 1946, but delivery is not expected until the late summer of 1947. An order has also been placed for a 5 cwt. Ford van for the use of the foreman in his supervision of the scheme and for the collection of salvage.

It is anticipated that a further ten men will be required, making a total of seventeen. It is not always possible to get the quantity or the right type of men required for this work. Many regard it as being an unimportant service, and others are attracted elsewhere by higher wages.

The disposal of the refuse forms a most important part of the scheme. The two existing dumps, one on Galleywood Common and the other, a disused gravel pit on privately owned land, at Broomfield, will not provide sufficient tipping capacity for the refuse to be collected, and further dumps at suitable points will have to be found. The system of refuse disposal known as the "Bradford" or "controlled" system will continue to be used.

The garage accommodation at the Public Cleansing Depot will not be sufficient to house the three additional vehicles, and extra accommodation is being provided.

A most important item in the efficient working of the scheme is the provision of a refuse bin at every house from where a collection takes place. The responsibility of providing a dustbin has been placed upon the occupier of the house. Special light-weight aluminium skips have been purchased for use by the refuse collectors.

In the following tables the present and proposed collection arrangements are set out:—

#### EXISTING REFUSE COLLECTION AND SALVAGE ARRANGEMENTS

<i>Parish</i>	<i>Refuse Collection Frequency</i>	<i>Direct or Contract Collection</i>	<i>Salvage Frequency</i>
Great Baddow	Fortnightly	Direct	Fortnightly
Boreham	Monthly	Contract	Monthly
Broomfield	Fortnightly	Direct	Fortnightly
Danbury	Weekly	Contract	Weekly & Monthly
Ingatstone	Weekly	Contract	Weekly & Monthly
Mountnessing	Weekly	Contract	Weekly & Monthly
Roxwell	Monthly	Contract	Monthly
Stock	Fortnightly	Direct	Fortnightly
Lt. Waltham	Monthly	Contract	Monthly
Writtle	Fortnightly	Direct	Fortnightly

*Note* :—The remainder of the parishes do not receive a refuse collection, but a monthly tour for the collection of salvage is carried out.

## PROPOSED COLLECTION UNDER NEW SCHEME.

Parish	Proposed Collection	Approx. No. of Houses	
		At end 1944	Included in Scheme
Great Baddow ...	... Direct/Weekly ...	1776	1765
Little Baddow ...	... Direct/Fortnightly ...	283	240
Boreham ...	... Direct/Fortnightly ...	329	308
Broomfield ...	... Direct/Weekly ...	509	482
Chignal ...	... Direct/Fortnightly ...	111	109
Danbury ...	... Direct/Weekly ...	707	641
Good Easter ...	... Direct/Fortnightly ...	117	110
East Hanningfield ...	... Direct/Fortnightly ...	128	101
South Hanningfield	... Direct/Fortnightly ...	389	99
	Contract/Fortnightly ...		246
West Hanningfield	... Direct/Fortnightly ...	175	145
Ingatestone ...	... Contraet/Weekly ...	702	677
Fryerning ...	...		
Great Leighs ...	... Direct/Fortnightly ...	226	213
Little Leighs ...	... Direct/Fortnightly ...	65	66
Margaretting ...	... Contraet/Fortnightly ...	190	195
Mashbury ...	... Direct/Fortnightly ...	42	45
Mountnessing ...	... Contract/Weekly ...	269	253
Pleshey ...	... Direct/Fortnightly ...	80	92
Rettendon ...	... Direct/Fortnightly ...	260	205
Roxwell ...	... Direct/Fortnightly ...	245	205
Runwell ...	... Direct/Fortnightly ...	380	238
Sandon ...	... Direct/Fortnightly ...	233	218
Springfield ...	... Direct/Fortnightly ...	129	105
Stock ...	... Contract/Weekly ...	346	291
Great Waltham	... Direct/Weekly		
	for Village ...	583	562
	Direct/Fortnightly for remainder		
Little Waltham	... Direct Weekly		
	for Village ...	246	233
	Direct/Fortnightly for remainder		
Woodham Ferrers	... Direct/Fortnightly ...	637	430
Writtle ...	... Direct/Weekly		
	for Village ...	957	938
	Direct/Fortnightly for remainder		
	Totals ...	10,114	9,212

### SALVAGE COLLECTION.

Details of the frequency of salvage collections have already been referred to in a previous table. One of the most important items of salvage is waste paper, and this material has averaged just over 6 tons per month during the year. This includes that collected by the Council's contractor. Casual female labour is employed at the Public Cleansing Depot for the sorting of the paper into various grades, and the subsequent baling of the paper is carried out by them. Textiles, bones, bottles and jars, are also in demand, and good prices are being obtained.

### COLLECTION OF SALVAGE DURING THE YEAR.

Materials	First Six Months				Second Six Months			
	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.
Bones ... ..	8	13	2	0	7	1	0	0
Boots and Shoes ...	0	1	2	0	0	5	0	0
Glass Bottles ... ..	0	13	0	0	0	7	0	0
Rubber ... ..	—	—	—	—	0	5	0	0
Scrap Metal ... ..	2	10	1	0	0	15	0	0
Textiles ... ..	3	0	3	0	2	19	2	0
Tins ... ..	6	4	0	0	1	16	1	0
Waste Paper and Card-board ... ..	38	7	1	20	35	12	2	0
Totals ... ..	59	12	1	20	49	1	1	0

In addition to the above-mentioned materials, 3384 bottles were also sold.

### NIGHT SOIL COLLECTION.

Night soil collection in the following parishes is now carried out by a contractor. The night soil is mainly disposed of outside the district.

<i>Parish</i>	<i>Approx. No. of Houses (Including Schools)</i>		
Rettendon ... ..	...	...	35
Great Waltham ... ..	...	...	99
Little Waltham ... ..	...	...	69
Woodham Ferrers ... ..	...	...	56

On the 4th October, 1946, a public Local Enquiry was held as a result of the Council's application to the Minister of Health to borrow the sum of £19,745 (pre-war estimate) in connection with the proposed sewerage scheme in the parishes of Great and Little Waltham, and this scheme has been agreed to in principle by the Minister. The completion of this scheme will render redundant the existing night soil collection in Great and Little Waltham.

### SANITARY INSPECTION OF THE AREA.

The table prepared by the Chief Sanitary Inspector, shows the amount of inspection work performed by the Inspectors.

**Slaughterhouses.** These were not in general use during the year.

**Knackers Yards.** There is one in the District, in the parish of Great Baddow. This is a modern building erected during 1935.

**Dairies and Cowsheds.** These are dealt with under the heading "Inspection and Supervision of Food."

**Smoke Abatement.** No complaints were received during the year.

**Camping Sites.**—During the year, twenty licences were in force under Section 269, Public Health Act, 1936, to use land as sites for moveable dwellings.

These licences were in force for twelve months or less.

## INSPECTIONS AND PARTICULARS OF NOTICES FOR THE YEAR, 1946.

Nature of Inspection	Total Inspec- tions	Notices Out- stand- ing at end of 1945	Notices Served		Notices	
			Informal	Statutory	Complied with	Out- standing at end of 1946
Infectious Diseases Inquiries ...	94	—	—	—	—	—
Disinfection ... ..	5	—	—	—	—	—
Houses Inspected and Recorded under Housing Acts ... ..	37	—	—	—	—	—
Do. under Public Health Acts ...	52	102	135	32	77	192
Re-inspections under Housing Acts...	119	—	—	—	—	—
Re-inspections under Public Health Acts ... ..	252	—	—	—	—	—
Inspections under Rural Housing Survey ... ..	4936	—	—	—	—	—
Overcrowding ... ..	26	2	2	—	2	2
Dirty condition of Houses ... ..	15	1	6	—	2	5
Other Nuisances ... ..	140	—	—	—	—	—
Re-inspections ... ..	95	—	—	—	—	—
Privies and Pail Closets ... ..	5	19	19	3	13	28
Water Closets ... ..	22	16	21	7	12	32
Urinals ... ..	20	—	—	—	—	—
House drainage ... ..	236	71	99	11	74	107
Water Supply ... ..	166	54	53	15	30	92
Pigstyes ... ..	9	—	1	—	—	1
Animals improperly kept ... ..	2	—	—	—	—	—
Schools ... ..	5	—	—	—	—	—
Milk Shops ... ..	4	—	—	—	—	—
Cowsheds and Dairies ... ..	248	48	27	—	12	63
Bakehouses ... ..	18	—	2	—	1	1
Ice-cream Premises ... ..	5	—	—	—	—	—
Slaughterhouses and Meatshops ...	191	—	—	—	—	—
Knackers Yards ... ..	6	—	—	—	—	—
Fresh and Fried Fishshops ... ..	9	—	—	—	—	—
Factories ... ..	13	—	2	—	1	1
Rats, Mice and Insects Pests ... ..	54	12	3	—	6	9
Tents, Vans, Sheds ... ..	111	2	—	—	1	1
Public Cleansing:—						
Ash bins ... ..	48	13	47	1	10	51
Refuse Dumps ... ..	121	—	—	—	—	—
Shops Act ... ..	1	—	—	—	—	—
Smoke Nuisances ... ..	—	—	—	—	—	—
Food Storage and Preparing Premises	—	—	—	—	—	—
Miscellaneous ... ..	942	5	22	—	14	13
<b>TOTAL... ..</b>	<b>8007</b>	<b>345</b>	<b>439</b>	<b>69</b>	<b>255</b>	<b>598</b>

In connection with the proposed comprehensive refuse collection scheme for the whole of the District, two surveys were made during the months of May and June, each covering over 9,500 houses.

The following tables provide statistics of work done as a result of the service of Informal and/or Statutory Notices :—

	1945	1946
Adequate ventilation provided to rooms ...	—	1
Ashbins provided ... ..	38	9
Brick footings repaired ... ..	—	2
Brick walls repaired or roughest ... ..	9	19
Chimney flues altered ... ..	—	—
Chimney stacks repaired or re-pointed ... ..	1	12
Ceiling plasters, repaired or renewed ... ..	13	12
Coppers repaired or provided ... ..	5	4
Cupboards repaired ... ..	—	2
Damp-proof courses repaired ... ..	—	—
Dampness remedied other than by d.p.e. ... ..	8	10
Dirty or verminous houses cleansed ... ..	5	5
Doors repaired or renewed ... ..	3	4
Eavesgutters and downspouts repaired or renewed	4	11
External wall plaster repaired or renewed ... ..	8	13
Fireplaces, Stoves, repaired or renewed ... ..	12	18
Floors repaired or re-laid ... ..	13	29
Foodstores provided or repaired ... ..	1	7
Handrails provided to staircases ... ..	1	7
Internal wall plaster repaired or renewed ... ..	17	12
Internal walls repaired ... ..	—	1
Lighting of rooms ... ..	—	1
Outbuildings repaired ... ..	—	1
Roofs repaired or renewed ... ..	32	23
Sinks provided or repaired ... ..	1	8
Sink waste pipes provided or renewed ... ..	2	13
Staircase provided or repaired ... ..	—	—
Washhouses repaired ... ..	1	5
Weatherboarded walls renewed or repaired ... ..	2	2
Window sills repaired or renewed ... ..	1	7
Windows or frames repaired or renewed ... ..	8	28
Windows re-glazed ... ..	3	3
Yards or paths repaired or paved ... ..	—	6
Miscellaneous repairs ... ..	7	18
Cesspools abolished ... ..	15	—
Cesspool covers renewed ... ..	—	1
Cesspool pumps repaired ... ..	—	1
Cesspools cleansed ... ..	4	6
Cesspools provided ... ..	—	—
Choked drains cleansed ... ..	13	8

	1945	1946
Drainage systems altered or repaired ... ..	7	4
Drainage cut off from ditches, watercourses, etc.	10	8
Foul ditches cleansed ... ..	2	4
Foul ponds cleansed ... ..	—	1
Houses connected to the sewer ... ..	15	2
Inspection covers repaired ... ..	—	2
Inspection chambers repaired ... ..	—	2
Pail closets converted to water closets ... ..	—	3
Overflows from cesspools abolished ... ..	—	3
Pail closet structures repaired or renewed ...	1	5
Pails provided to closets ... ..	2	1
Urinals repaired or provided ... ..	—	1
Ventilation pipes repaired ... ..	—	2
Water closets cleansed ... ..	—	—
Water closet floors repaired ... ..	—	—
Water closet drain repaired ... ..	—	—
Water closet flushing apparatus repaired or renewed (provided 1, repaired 4) ... ..	5	5
Water closet pedestals provided ... ..	5	2
Water closet structures repaired or renewed ...	2	1
Yard gullies, channels, provided or repaired ...	—	1
Hot water boilers repaired or renewed ... ..	1	1
Main water supply provided to houses ... ..	22	24
Pumps repaired ... ..	2	—
Water pipes, taps repaired ... ..	4	2
Water tanks cleansed ... ..	—	—
Water tank covers provided ... ..	—	—
Wells cleansed, repaired or improved ... ..	1	—
Water supplies improved ... ..	3	1
Water butts provided ... ..	—	6
Approaches to cowsheds or dairies improved ...	3	—
Buildings converted to Cowsheds ... ..	—	1
Cesspools provided ... ..	—	—
Choked drains cleansed ... ..	—	—
Cowsheds cleansed ... ..	—	—
Cowshed floors repaired ... ..	2	1
Cowsheds reconstructed ... ..	—	3
Cowshed roofs repaired ... ..	—	—
Cowshed walls rendered or repaired ... ..	9	6
Dairies cleansed ... ..	—	—
Dairies sealed off from cowsheds ... ..	—	—
Dairies provided ... ..	1	2

	1945	1946
Dairy entrances repaired ... ..	—	—
Dairies repaired or improved ... ..	4	—
Dairy floors repaired ... ..	2	—
Dairy roofs repaired ... ..	—	—
Dairy walls rendered or repaired ... ..	5	1
Drainage to cowshed or dairy improved ... ..	4	2
Improvements to water supply ... ..	1	—
Lighting to cowshed or dairy improved ... ..	5	3
Manure accumulations removed ... ..	7	4
Mechanical milking plants, sterilizers, etc., provided, cleansed or repaired ... ..	3	1
Milking stools cleansed ... ..	—	1
Other improvements to cowsheds or dairies ... ..	16	5
Ventilation to cowsheds or dairies ... ..	1	—
Water supply provided to cowsheds or dairies ... ..	1	—
Miscellaneous work done ... ..	13	8

### SWIMMING BATHS AND POOLS.

There are two privately owned swimming pools within the District which are open to the public.

**Swimming Pool, The Chase, Ingatestone.** This swimming pool is owned by The Chase, Ltd.

Sanitary accommodation is provided for both sexes.

**May-Phill Roadhouse, Battlesbridge.** The swimming pool adjoins the Roadhouse which is situated about 250 yards from the Chelmsford—Southend Road on the bank of the River Crouch.

The size of the pool is 175ft. by 45ft. 6ins., with a depth varying from 3ft. to 8ft. 6ins. and its capacity is 312,000 gallons.

Sanitary accommodation is provided for both sexes.

The pool was not in use during the year.

### HOUSING.

At the end of 1946 the District Council owned 1,039 houses. The numbers for each parish are given on page 36. The District Council estimated that a minimum of 1,043 new houses would be required during the first five years after the war, and that, circumstances permitting, 227 of these would be erected during the first year. Owing to the acute shortage of building labour

and materials the number of houses scheduled to be erected during the first year was severely curtailed and only 12 new permanent houses were completed and occupied, whilst various contracts, details of which are given in a following table, were let and building construction was well in hand.

Ninety Temporary Bungalows have been allotted to the District, 70 of which have been completed and are occupied. The balance of 20 Temporary Bungalows are to be erected in the parish of Broomfield. These Temporary Bungalows are provided by the Government and the District Council is responsible for their maintenance.

A number of hutments on government sites in the District were acquired during the year and after extensive alterations these were adapted for living accommodation. At the end of 1946, a total of 117 huts were completed and occupied.

### POST WAR HOUSING PROGRAMME

PARISH	Number of Houses	Sites acquired	Sites to be acquired	
	Five Year Programme	Acreage	Acreage	No. of Houses erected and in the course of construction at 31.12.46
Great Baddow (excluding Galleywood)	100	10.6	11.6	18
Galleywood ... ..	44	5.5	—	20
Little Baddow ... ..	14	0.5	2.0	4
Boreham ... ..	44	7.8	—	—
Broomfield ... ..	44	1.8	3.7	14
Chignall ... ..	18	3.7	—	—
Danbury ... ..	38	—	9.3	—
Good Easter ... ..	20	—	3.3	—
East Hanningfield ... ..	30	1.1	3.9	—
South Hanningfield ... ..	36	1.7	1.8	—
West Hanningfield ... ..	34	—	5.6	—
Ingatestone and Fryerning ... ..	56	4.0	6.6	12
Great Leighs ... ..	30	—	6.8	—
Little Leighs ... ..	10	—	1.6	—
Margaretting ... ..	18	3.0	—	—
Maslibury ... ..	6	—	1.0	—
Mountnessing ... ..	14	—	3.4	—
Pleshey ... ..	14	4.0	2.3	—
Rettendon ... ..	46	—	35.0	—
Roxwell ... ..	24	17.2	1.5	—
Runwell ... ..	78	—	10.0	—
Sandon ... ..	10	1.25	—	—
Springfield ... ..	18	—	5.0	—
Stock ... ..	48	—	9.1	—
Great Waltham ... ..	100	2.0	14.3	—
Little Waltham ... ..	33	1.5	6.4	—
Woodham Ferrers ... ..	46	7.75	—	—
Writtle (excluding Highwood) ... ..	48	6.0	—	12
Highwood ... ..	22	—	3.6	—
TOTALS ... ..	1043	79.4	147.8	80

## Council Houses.

PARISH	HOUSES ERECTED UNDER						Total
	The Housing Act, 1890	The State-aided Scheme charges being a General Rate limited to 1d. Rate	The Housing (Financial Provisions) Act, 1924	The Housing Act, 1925	The Housing Act, 1930	The Housing Act, 1936 /46	
	1	2	3	4	5	6	7
Baddow, Great (s.p.a.)	—	51	57	—	—	95	203
Baddow, Great (o.s.p.a.)	—	12	16	16	—	5	49
Baddow, Little ...	6	—	8	—	—	8	22
Boreham ...	—	—	46	—	6	18	70
Broomfield ...	—	—	40	—	6	5	51
Chignal ...	—	—	8	—	—	—	8
Danbury ...	6	25	4	—	—	—	35
Good Easter ...	—	6	—	—	—	6	12
Hanningfield, East	—	—	12	—	—	6	18
Hanningfield, South	6	—	—	—	—	—	6
Hanningfield, West	—	—	4	—	—	4	8
Ingatestone and Fryerning ...	2†	30	32	—	2	32	98
Leighs, Great ...	—	—	10	—	—	—	10
Leighs, Little ...	—	—	6	—	—	—	6
Margaretting ...	—	6	—	—	—	12	18
Mashbury ...	—	—	—	—	—	—	—
Mountnessing ...	—	8	—	—	—	28	36
Pleshey ...	—	—	4	—	—	—	4
Rettendon... ..	—	—	12	—	—	—	12
Roxwell ...	—	—	12	—	—	14	26
Runwell ...	—	—	14	—	—	—	14
Sandon ...	4	4	6	—	—	10	24
Springfield ...	—	—	—	—	—	12	12
Stock ...	—	—	10	4	—	—	14
Waltham, Great (Village area) ...	—	—	20	—	—	—	20
Waltham, Great (Ford End) ...	—	—	12	—	—	4	16
Waltham, Little ...	—	—	6	—	—	—	6
Woodham Ferrers...	—	4	24	—	—	18	46
Writtle (s.p.a.) ...	—	16	102	31‡	—	24	173
Writtle (o.s.p.a.) ...	—	—	12	—	—	10	22
TOTALS ...	24	162	477	51	14	311‡	1039

† Ingatestone Waterworks Cottages.

‡ Including 12 Cottages the cost of which was borne by the Housing Estates Repairs Fund.

\* Includes 6 cottages purchased by the Council:—

1 in Great Baddow (s.p.a.).

3 in Galleywood.

2 in Ford End; and

10 Agricultural Cottages:—

West Hanningfield 4.

Writtle 4.

Ford End 2.

TABLE SHOWING THE NUMBER OF HOUSES ERECTED, IN THE COURSE OF ERECTION AND HUTS ACQUIRED AND ADAPTED FOR LIVING ACCOMMODATION BY THE RURAL DISTRICT COUNCIL DURING 1946.

Parish	Permanent Council Houses		Temporary Bungalows	Government Huts Acquired and Adapted	Private Houses
	Erected	In the Course of Erection			
Great Baddow (SPA) ...	4	14	30	—	46
Great Baddow (OSPA) ...	—	20	—	—	5
Little Baddow ...	—	4	—	—	1
Boreham ...	—	—	—	80	1
Broomfield ...	—	14	—	—	—
Chignal ...	—	—	—	3	—
Danbury ...	—	—	—	1	2
Good Easter ...	—	—	—	—	—
East Hanningfield ...	—	—	—	—	—
West Hanningfield ...	—	—	—	—	1
South Hanningfield ...	—	—	—	—	10
Iugatestone & Fryerning ...	—	12	20	—	3
Great Leighs ...	—	—	—	106	—
Little Leighs ...	—	—	—	—	—
Margaretting ...	—	—	—	—	12
Mashbury ...	—	—	—	—	—
Mountnessing ...	—	—	—	—	1
Pleshey ...	—	—	—	—	1
Rettendon ...	—	—	—	—	3
Roxwell ...	—	—	—	11	—
Runwell ...	—	—	—	—	7
Sandon ...	—	—	—	—	6
Springfield ...	—	—	—	—	—
Stock ...	—	—	—	—	3
Great Waltham ...	—	—	—	—	1
Little Waltham ...	—	—	—	46	1
Woodham Ferrers ...	—	—	—	—	4
Writtle (SPA) ...	8	4	20	—	9
Writtle (OSPA) ...	—	—	—	—	—
Totals ...	12	68	70	247	117

(Dwellings erected and adapted by the R.D.C.)  
GRAND TOTAL :— 329.

The following tabular statement gives details of the housing work carried out during the year.

1. <i>Inspection of Dwelling Houses during the year :—</i>	
(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ... ..	301
(b) Number of Inspections made for the purpose	822
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 ... ..	90
(b) Number of Inspections made for the purpose	160
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ... ..	21
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation ... ..	156
2. <i>Remedy of Defects during the year without Service of Formal Notices :—</i>	
Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers ... ..	56
3. <i>Action under Statutory Powers during the year :—</i> Proceedings under Public Health Acts.	
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied ... ..	30
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—	
By Owners ... ..	11
—Proceedings under Sections 11 and 13 of the Housing Act, 1936.	
(1) Number of dwelling-houses in respect of which Demolition Orders were made ... ..	9
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders :—	
By Owners ... ..	7

## RURAL HOUSING SURVEY

(*under Ministry of Health Circular 64/44*)

based on the recommendations of the

### THIRD REPORT OF THE RURAL HOUSING SUB-COMMITTEE OF THE CENTRAL HOUSING ADVISORY COMMITTEE

The Rural Housing Survey in this District was completed in December, 1946. It had been initiated to provide a record of the condition of every working class house in the district as a basis for a programme of improvement of rural housing conditions to be carried out over a period of years. The survey had been commenced in July, 1945, and occupied the whole time of two assistants for the next eighteen months. For the purposes of the survey, all dwellings having a rateable value of £20 or less have been visited, the total number of these dwellings being 7,365.

The categories in which the houses are classified are as follows :—

1. Satisfactory in all respects.
2. Minor defects.
3. Requiring repair, structural alteration or improvement.
4. Appropriate for reconditioning under the Housing (Rural Workers) Acts.
5. Unfit for habitation and beyond repair at reasonable cost.

One of the objects of the survey was to enable local authorities to draw up a long-term programme of reconditioning work. In view of the present shortage of building labour and materials and the concentration upon new houses, it is not at present practicable to put this into effect. However, a considerable amount of "follow up" work has been carried out by the Sanitary Inspectors where the survey has revealed the existence of serious defects.

It will be observed from the following table that 4,339 properties (or nearly 60 per cent of the total visited) have been placed in either category 1 or category 2. Little or no action will be necessary in regard to these properties, which consist mainly of houses owned by the local authority and those built

by private enterprise in the decade before the war. A large number of these latter properties are of the owner-occupier type. The remaining 2,026 properties will need further consideration, and the Sanitary Inspectors have now commenced to inspect those houses placed in category 5, with a view to dealing with the most serious cases.

It should be added that the properties shown in category 4 could have been placed in one of the other categories, in the main category 3, and provision has been made to put this into effect. This action has been taken because owners are at present unable to take advantage of the Housing (Rural Workers) Acts, which have now lapsed.

### Housing Survey of Houses £20 and under Rateable Value exclusive of Council Houses.

Parish	1. Fit	2. Minor Defects	3. Requiring Repair, etc.	4. Recon- dition	5. Unfit	Houses Not Surveyed
Great Baddow ... ..	737	135	203	4	32	1111
Little Baddow ... ..	56	66	31	10	1	164
Boreham ... ..	70	39	123	—	8	240
Broomfield ... ..	183	15	155	2	5	360
Chignal ... ..	11	30	34	26	5	106
Danbury ... ..	175	58	215	2	21	471
Good Easter ... ..	10	33	28	17	5	93
Hanningfield East ... ..	7	29	36	5	12	89
Hanningfield South ... ..	108	130	79	10	15	342
Hanningfield West ... ..	33	58	55	10	10	166
Ingatestone ... ..	125	60	211	—	21	417
Great Leighs ... ..	37	70	55	14	12	188
Little Leighs ... ..	21	25	7	—	—	53
Margaretting ... ..	39	52	41	9	3	144
Mashbury ... ..	4	16	14	5	1	40
Mountnessing ... ..	50	64	72	10	6	202
Pleshey ... ..	8	27	26	1	4	66
Rettendon ... ..	54	79	61	4	3	211
Roxwell ... ..	43	54	60	20	15	192
Runwell ... ..	135	100	51	1	12	299
Sandon ... ..	57	61	32	17	6	173
Springfield ... ..	20	16	58	—	2	96
Stock ... ..	85	34	132	—	4	255
Great Waltham ... ..	56	176	164	40	30	466
Little Waltham ... ..	64	76	59	7	5	211
Woodham Ferrers ... ..	189	236	82	8	29	544
Writtle ... ..	155	68	407	2	34	666
	2532	1807	2491	224	311	7365

## INSPECTION AND SUPERVISION OF FOOD

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### Milk Supply.

There are 230 registered cowsheds and dairies in the District in which milk is produced for sale, a large proportion of which are licensed for the production of Designated Milks by the Essex County Council. In addition, there are 21 dairies used by persons who retail milk purchased from other producers, and 20 persons who are registered to retail milk within the district, with premises outside the district. These premises have been regularly inspected and details of works which have been carried out as a result of requests from your Chief Sanitary Inspector's Department in order to improve such premises are shown in the table on page 34.

17 licences were granted under the Milk (Special Designations) Regulations 1936/46.

### Meat and Other Foods.

All animals are at present slaughtered in slaughterhouses outside the District. Meat exposed for sale or deposited for manufacture in premises within the district is regularly inspected.

The following were condemned as unfit for human consumption :—

176 tins of Evaporated Milk, 13 lbs. Bacon, 23 tins Baked Beans, 1 tin Brisling, 1 tin Carrots, 32 tins Condensed Milk, 1 tin Crawfish, 2 6 lb. tins Corned Mutton, 99 6 lb. tins Corned Beef, 14 12 oz. tins Corned Beef, 5 tins Curry Powder, 312 Eggs, 1 tin Fish Cakes, 6 lbs. Jam, 2 tins Irish Stew, 482½ lb. Meat, 4 tins Meat Roll, 2 tins Meat & Vegetable Ration, 1 tin Mixed Vegetables, 24 lbs. Offal, 1 tin Pears, 1 tin Plums, 1 tin Dried Eggs, 55 tins Peas, 9 tins Pilchards, 14 tins Stewed Steak, 13 tins Sardines, 28 tins Salmon, 3 tins Soup, 3 tins Steak & Kidney Pudding, 7 cwt. 2 stones Fish, 40 lbs. Dates, 21½ lbs. Butter, 25 lbs. Prunes, 1 12 oz. tin American Luncheon Meat.

## **TOWN PLANNING**

By agreement, several Local Authorities in the Mid-Essex area, including Chelmsford Rural District Council, delegated their powers in connection with the preparation of Town Planning Schemes to the Mid-Essex Regional Planning Committee, and the agreement came into force on 1st April, 1933.

## **PREVALENCE AND CONTROL OVER INFECTIOUS DISEASES**

### **Infectious Diseases Generally**

There were 297 cases of infectious diseases (exclusive of Tuberculosis) notified during the year as compared with 444 for the previous year.

There was no major outbreak of notifiable infectious disease during the year.

Apart from cases of measles and whooping cough, there were 71 cases of infectious diseases notified compared with 52 in the previous year. Further details of the incidence of notifiable infectious diseases classified according to age and locality is given in the tables on pages 43 and 45.

A number of children in a neighbouring district vomited after partaking of milk which was provided at a farm in the Chelmsford Rural District. The cows at the farm were examined by the Veterinary Surgeon and it was ascertained that one cow had suppuration of the udder. Staphylococci organisms were isolated from a sample of milk taken from this particular cow. Although these organisms were found in the milk it was considered that, as the children vomited immediately after partaking of the milk, the cause of the illness was due to a chemical, probably from the detergent used for cleansing the equipment at the dairy. The illness lasted a few hours.

A number of persons who may have been in contact with smallpox came into the district but fortunately no case occurred.

TABLE SHOWING LOCAL DISTRIBUTION OF CASES  
NOTIFIED DURING THE YEAR.

PARISH	Paratyphoid "B"	Cerebro-Spinal Meningitis	Scarlet Fever	Diphtheria	Measles	Whooping Cough	Pneumonia	Erysipelas	Puerperal Pyrexia	Jaundice	Dysentery	Pulmonary Tuberculosis	Other Forms of Tuberculosis	Totals
Great Baddow	...	—	6	—	20	17	—	3	—	1	—	5	1	47
Little Baddow	...	—	—	—	—	9	—	—	—	1	—	—	—	16
Boreham	...	—	—	—	16	9	1	—	—	—	—	1	—	29
Broomfield	...	1	—	—	6	4	1	1	—	1	—	—	—	14
Chignal	...	—	—	—	3	2	—	—	—	—	—	—	—	8
Danbury	...	—	4	—	6	17	2	1	—	12	—	—	1	40
Good Easter	...	—	—	—	—	—	—	—	—	—	—	—	—	—
East Hanningfield	...	—	—	—	—	—	—	—	—	—	—	—	—	—
South Hanningfield	...	—	—	—	1	14	1	—	—	—	—	—	—	16
West Hanningfield	...	—	—	—	—	4	—	—	—	—	—	—	—	4
Ingatestone & Fryerning	...	—	—	—	5	32	—	—	—	—	—	—	1	38
Great Leighs	...	—	17	—	—	—	—	—	—	—	—	—	—	17
Little Leighs	...	—	—	—	—	—	—	—	—	—	—	—	—	—
Margaretting	...	—	—	—	3	—	—	—	—	—	—	1	—	4
Mashbury	...	—	—	—	—	—	—	—	—	—	—	—	—	—
Mountnessing	...	—	—	—	17	—	1	—	1	—	—	—	—	19
Pleshey	...	—	—	—	—	—	—	—	—	—	—	—	—	1
Rettenden	...	—	5	—	2	—	—	—	—	—	—	—	—	7
Roxwell	...	—	—	—	—	—	—	—	—	—	—	—	—	1
Runwell	...	—	—	—	—	—	—	—	—	—	—	—	—	1
Sandon	...	—	—	—	1	1	—	—	—	—	—	—	—	2
Springfield	...	—	—	—	—	1	—	—	—	—	—	—	—	3
Stock	...	—	—	—	—	15	—	—	—	—	—	—	1	15
Great Waltham	...	—	1	—	—	—	—	—	—	—	—	3	—	4
Little Waltham	...	—	2	—	—	—	—	—	—	—	—	—	—	3
Woodham Ferrers	...	—	1	—	1	12	—	—	—	3	—	—	—	17
Writtle	...	—	1	—	5	3	—	—	1	—	—	2	—	13
TOTALS ...	1	1	37	—	86	140	6	5	2	18	1	18	4	319

The immunisation of children against diphtheria was continued during the year. The prophylactic used throughout was A.P.T.

The percentage of children immunised at the end of 1946 based on the estimated population of Registrar-General was :

Aged 1 to 14	...	...	...	...	69%
Aged under 5	...	...	...	...	40%
Aged 5 to 14	...	...	...	...	87%

In addition 1,732 who are now over 15 years of age had been immunised but are excluded from the percentage calculations.

The immunisation is continuing and it is hoped that parents will take more advantage of the facilities provided for protecting their children against such a serious disease as Diphtheria.

It is satisfactory to note that no case of Diphtheria occurred among children under 15 years of age.

Much assistance in connection with diphtheria immunisation was given by the Health Visitors and Teachers, but even with this co-operation it is unfortunate that the number of parents availing themselves of the service had declined slightly. Detailed particulars of the position at the end of 1946 is shown in the tables on pages 46 and 47.

**Scabies.** During the year, 5 cases were treated at St. John's Hospital in addition to a number of cases treated at home.

### TUBERCULOSIS.

The following table gives particulars of new cases of Tuberculosis and deaths during the year.

Age Periods	*New Cases				Deaths			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 ...	—	—	—	—	—	—	—	—
1—5 ...	—	—	—	—	—	—	—	—
5—10 ...	—	—	—	3	—	—	—	1
10—15 ...	—	—	—	—	—	—	—	—
15—20 ...	—	2	1	—	—	—	—	—
20—25 ...	2	—	—	—	—	—	—	—
25—35 ...	2	2	—	—	—	1	—	—
35—45 ...	5	1	—	—	—	1	—	—
45—55 ...	2	—	—	—	1	—	—	—
55—65 ...	2	—	—	—	—	—	—	—
65 & over ...	—	—	—	—	2	1	—	—
TOTALS ...	13	5	1	3	3	3	—	1

\* Not including cases of tuberculosis removed into the district during the year, which had been previously notified elsewhere.

## NOTIFIABLE DISEASES DURING THE YEAR.

Notifiable Disease	Total Cases Notified	Under 1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 and over	Cases admitted to Hospital	Total Deaths
Cerebro-Spinal Meningitis...	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Scarlet Fever ... ..	37	—	1	—	2	3	17	7	1	2	1	2	1	31	—
Diphtheria ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles ... ..	86	5	7	12	10	10	35	5	1	1	—	—	—	5	—
Pneumonia ... ..	6	1	—	—	—	—	1	—	—	1	—	1	2	1	2
Erysipelas ... ..	5	—	—	—	—	—	—	—	—	1	1	2	1	1	—
Whooping Cough ... ..	140	14	12	16	19	13	55	3	2	3	2	—	1	1	1
Jaundice ... ..	18	—	—	—	1	—	3	4	1	5	4	—	—	—	—
Puerperal Pyrexia ... ..	2	—	—	—	—	—	—	—	—	2	—	—	—	1	1
Dysentery ... ..	1	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Paratyphoid " B " ...	1	—	—	—	—	—	—	—	—	—	—	1	—	1	—
TOTALS ... ..	297	20	20	28	32	26	111	19	5	17	8	6	5	42	4

## Diphtheria immunisation in relation to child population.

	Number of children who had completed a full course of immunisation at any time up to 31st Dec., 1946.							
	Under 1 1946	1 1945	2 1944	3 1943	4 1942	5 to 9 1937-1941	10-14 1932-1936	Total Under 15
Age at 31.12.45 <i>i.e.</i> Born in year ...								
Number immunised ...	10	218	295	300	356	1,951	2,206	5,336
Number of births during year ...	660	586	670	584	600	2,719	2,601	8,440
Estimated mid-year popu- lation, 1945 ...	2,920			4,760				
Percentage of children immunised ...	40%			87%				69%

## DIPHTHERIA NOTIFICATIONS AND DEATHS IN RELATION TO IMMUNISATION

NOTIFICATIONS		DEATHS		
Age at date of Notification	Number of Cases Notified	Number of cases included in preceding column in which the child had completed a full course of immunisation	Age at date Death	Number of Deaths
Under 1	—	—	Under 1	—
1	—	—	1	—
2	—	—	2	—
3	—	—	3	—
4	—	—	4	—
5 to 9	—	—	5 to 9	—
10 to 14	—	—	10 to 14	—
Totals	Nil	Nil	Totals	Nil
				Nil

TABLE SHEWING POPULATION AND NUMBER OF HOUSES AT CENSUS 1931, AND THE NUMBER AT THE END OF DECEMBER, 1946.

	Area in statute acres (land and inland water)	Census, 1931		Number of houses at end of 1946
		Houses	Population	
Baddow, Great ... ..	3805	962	3652	†1847
Baddow, Little ... ..	2755	198	751	285
Boreham ... ..	3802	269	1078	402
Broomfield ... ..	1851	433	1310	507
Chignal ... ..	2303	104	350	126
Danbury ... ..	3495	475	1807	712
Good Easter ... ..	1988	103	403	117
Hanningfield, East ... ..	2519	117	500	115
Hanningfield, South ... ..	4946	72	1071	411
Hanningfield, West ... ..	3105	135	521	186
Ingatestone and Fryerning...	4133	620	2352	722
Leighs, Great ... ..	3197	194	728	330
Leighs, Little ... ..	1079	52	158	65
Margaretting ... ..	2284	162	638	199
Mashbury ... ..	898	41	143	41
Mountnessing ... ..	2793	438	749	266
Pleshey ... ..	732	75	272	80
Rettendon ... ..	3652	200	794	255
Roxwell ... ..	4782	194	774	256
Runwell ... ..	2070	190	678	405
Sandon ... ..	2377	150	618	237
Springfield ... ..	1827	116	388	125
Stock ... ..	3474	185	976	342
Waltham, Great ... ..	7010	542	1941	553
Waltham, Little ... ..	2586	190	720	207
Woodham Ferrers ... ..	4753	391	1353	635
Writtle ... ..	8374	831	3111	†1004
TOTALS ... ..	86590	7439	27836	10530

† In Great Baddow s.p.a. 1489.

‡ In Writtle s.p.a. 783.

# PETROLEUM LICENCES IN FORCE DURING 1946

Name of Licensee	Parish	Storage in Gallons
Carters (Great Baddow) Ltd. ...	Great Baddow	500
E.C.C. (Surveyor's Dept.) ...	" "	500
Jaekson, W.A. ... ..	" "	1,800
Marven, D. & Co. ... ..	" "	300
Rand Bros., Ltd. ... ..	" "	1,000
Shipp, J. H. ... ..	" "	1,000
Taylor, W. L. ... ..	" "	500
Thomas & Evans Ltd. ... ..	" "	500
Waskett, W. A. ... ..	" "	1,000
English Timber Supply Co. (Essex) Ltd. ... ..	Little Baddow	500
Fordson Estates Ltd. ... ..	Boreham	500
Maekenzie, H. C. & Graham, J. ...	"	2,000
Mouser, J. J. ... ..	"	500
Seabrook & Sons Ltd. ... ..	"	300
Day, J. ... ..	Broomfield	1,000
Harris, W. ... ..	"	300
Marriage, L. ... ..	"	500
Stubbins, C. ... ..	"	500
Stubbins, W. J. ... ..	"	300
Ashdown, F. H. ... ..	Danbury	1,000
Baxter, G. L. Ltd. ... ..	"	500
Christmas, W. T. ... ..	"	500
Clark, A. ... ..	"	250
Doe, P. ... ..	"	500
Hollowell, W. G. ... ..	"	500
Morse, M. R. ... ..	"	1,000
Upson, E. S. ... ..	"	250
Vale, G. ... ..	"	1,000
Wakefield, H. ... ..	"	300
Matthews, J. A. ... ..	Good Easter	250
Pudney, J. B. ... ..	East Hanningfield	500
Watts, E. E. ... ..	South Hanningfield	1,000
Warder, G. W. C. ... ..	" "	500
Gaymer, R. C. ... ..	Ingatestone	500
Green, T. ... ..	"	500
Hasler & Co. Ltd. ... ..	"	1,000
Hawkes, J. W. ... ..	"	2,000
Pudney, W. & A. ... ..	"	500
Westle, J. E. ... ..	"	1,500
Lagden, H. ... ..	Great Leighs	300
Sidgwick, J. E. ... ..	" "	400
Whitworth, J. ... ..	" "	400
Wright, J. S. ... ..	" "	250
Seabrook, W. & Sons ... ..	Little Leighs	300
Farrow, C. A. R. ... ..	Margaretting	300
Leech, N. H. ... ..	" "	500
Matthews, R. & Son ... ..	Mashbury	250
Cotton, A. J. ... ..	Mountnessing	500
Eneffer, F. C. ... ..	"	2,300
Kean, G. ... ..	"	500
Carried forward ... ..		33,550

Name of Licensee	Parish	Storage in Gallons
King, A. & Son ... ..	Mountnessing	1,500
Bevan, G. W. ... ..	Rettendon	500
Bright, W. A. ... ..	"	1,000
Broadway, F. W. G. ... ..	"	1,000
Cooper, W. ... ..	"	1,500
Smith, G. W. ... ..	"	500
Day, S. ... ..	Roxwell	500
Doe, Bros. ... ..	"	500
Torrance, M. ... ..	"	500
Runwell Hospital ... ..	Runwell	500
Warren, A. ... ..	"	1,000
Barr, J. ... ..	Sandon	2,500
Sandon Egg Farms Ltd. ... ..	"	500
Magness, J. R. ... ..	Springfield	300
Sargant, W. H. ... ..	Stock	1,500
Bartrupt, C. & Son ... ..	Great Waltham	500
Bartrupt, L. ... ..	" "	500
Cass, J. ... ..	" "	250
Readhead, H. ... ..	" "	500
Rogers, F. & Sons ... ..	" "	500
Rowe, J. O. ... ..	" "	200
Seabrook, E. ... ..	" "	500
Sterling Poultry Products ... ..	" "	300
Amos, E. W. ... ..	Little Waltham	400
Day, A. ... ..	" "	1,000
Eaton, S. J. ... ..	" "	2,500
Poulton, W. W. ... ..	" "	500
Cribbs, G. ... ..	Woodham Ferrers	1,500
Rush, W. A. ... ..	" "	2,000
Slater, R. H. ... ..	" "	1,500
Swan, M. G. ... ..	" "	250
Adams, W. H. ... ..	Writtle	1,500
Lowe Bros. ... ..	"	500
Preston, H. S. H. ... ..	"	2,500
Richardson, J. H. ... ..	"	500
Grand Total ...		65,250

Total number of Licences in force in 1946	...	85
" " " " " " " 1945	...	87
" " " " " " " 1944	...	54

Total Storage for 1946	...	...	...	65,250
" " " 1945	...	...	...	59,500
" " " 19 4	...	...	...	40,000

TABLE SHOWING THE EFFECT ON THE AREA OF THE CHELMSFORD RURAL DISTRICT AS A RESULT OF TRANSFERS OF ACREAGE UNDER THE ESSEX COUNTY REVIEW ORDER, 1943, AND THE COUNTY OF ESSEX (RURAL PARISHES) CONFIRMATION ORDER, 1946.

PARISH	Acreage at 1931 Census	TRANSFERRED		REARRANGEMENT OF PARISH AREAS		Acreage 31st Dec 1946
		To Chelmsford Rural District —	From Chelmsford Rural District —	Acquired from —	Ceded to West Hanningfield (77) Sandon (28)	
GREAT BADDOW ...	3910	—	—	—	—	3805
LITTLE BADDOW ...	2755	—	—	—	—	2755
BOREHAM ...	3802	—	—	—	—	3802
BROOMFIELD ...	2332	—	Borough of Chelmsford (390)	—	Chignal (91)	1851
BUTTSBURY ...	2113	—	Billericay U.D.C. (1363)	—	—	—
CHIGNAL ...	2026	—	—	Broomfield (91) Great Waltham (116) Writtle (70)	—	2303
DANBURY ...	3495	—	—	—	—	3495
GOOD EASTER ...	1988	—	—	—	—	1988
EAST HANNINGFIELD	2682	—	—	—	West Hanningfield (132) Rettendon (13) South Hanningfield (18)	2519
SOUTH HANNINGFIELD	1489	Billericay U.D.C. Downham (1614) Ramsden Crays (577) Ramsden Bellhouse (1178)	—	Rettendon (70) East Hanningfield (18)	—	4946
WEST HANNINGFIELD	2838	—	—	Great Baddow (77) East Hanningfield (132) Sandon (58)	—	3105

continued on next page]

INGATESTONE ...	4133	—	—	—	—	4133
GREAT LEIGHS ...	3147	—	—	—	Little Waltham (12)	3197
LITTLE LEIGHS ...	1079	—	—	—	—	1079
MARGARETTING ...	2284	—	—	—	—	2284
MASHBURY ...	898	—	—	—	—	898
MOUNTNESSING ...	—	Billericay U.D.C. Shenfield (165) Mountnessing (2628)	—	—	—	2793
PLESHEY ...	732	—	—	—	—	732
RETTENDON ...	3709	—	—	—	East Hanningfield (13)	3652
ROXWELL ...	4782	—	—	—	—	4782
RUNWELL ...	2070	—	—	—	—	2070
SANDON ...	2407	—	—	—	Great Baddow (28)	2377
SPRINGFIELD ...	2267	—	—	—	—	1827
STOCK ...	2724	—	—	—	Buttsbury (750)	3474
GREAT WALTHAM ...	7452	—	—	—	—	7010
LITTLE WALTHAM ...	2310	—	—	—	Chignal (116) Little Waltham (326)	2586
WOODHAM FERRERS	4482	Rochford R.D. (271)	—	—	—	4753
WRITTLE ...	8458	—	—	—	Widford (326)	8374
WIDFORD ...	681	—	—	—	—	—
TOTALS ...	83045	6433	2888	—	—	86590

## A REVIEW OF SOME OF THE ASPECTS OF PUBLIC HEALTH IN THE RURAL DISTRICT OF CHELMSFORD.

This review is compiled from the Minutes of Meetings dating back to 1872, and from Annual Reports of various Medical Officers of Health who served the District since the passing of the Public Health Act of 1872, when the Rural Sanitary Authority was first formed.

The District, which is situated near the centre of the County of Essex, has an irregular oblong form, 13 to 16 miles from north to south and 10 to 13 miles from east to west, and completely surrounds the Borough of Chelmsford, which is the county town. Its character is mainly rural, and the population in 1946 was estimated to be 35,190.

Of the 86,590 acres in the District, about 380 acres are common land—157 acres on Danbury Common, 47 acres at Mill Green (parish of Ingatestone and Fryerning), and 175 acres on Galleywood Common, in the parish of Great Baddow. A small area of this latter Common is in the Borough of Chelmsford. The District Council has purchased Galleywood Common with the Rights of Lord of the Manor.

On the north, the District is bounded by the Dunmow Rural District; on the south by the Rayleigh Urban and Rochford Rural Districts, being separated from these by the River Crouch; on the east, by the Braintree and Maldon Rural Districts; and on the west, by the Billericay and Brentwood Urban, and Ongar Rural Districts.

The northern area is covered with boulder clay, varying in thickness from four inches to about sixty feet. Between this boulder clay and the London clay, pockets of sand are scattered at irregular intervals. Danbury Hill, capped with gravel, acts as a gathering ground for water which finds its way into springs that used to supply a number of parishes with water. Mill Green and Galleywood Commons are similar outcrops of gravel.

The greater part of the District is drained by the River Chelmer and its tributaries, though the south-eastern corner of the District is drained by the River Crouch and a number of southerly streams flowing into it. The River Crouch is tidal as far up as Battlesbridge in the parish of Rettendon.

The area of the District has been altered from time to time. In 1881, the hamlet of Orsett was added to the parish of Stock.

In 1907 an area of 831 aeres, with a population of 3,408, was transferred to the Borough of Chelmsford. As a result of the County Review in 1934, the following transfers took place.

To the Rural District 6,433 aeres were added.

From the Rural District 2,888 aeres were transferred to other authorities leaving a net gain of 3,545 acres to the District. Details of these latest changes are set out in the Report.

The first real effort for dealing with public health matters dates back to 1872, when the Public Health Act of that year created Rural Sanitary Authorities, and the first meeting of the Chelmsford Rural Sanitary Authority took place on the 3rd September, 1872, at the Union House, Chelmsford. The first chairman appointed was Mr. James Christy Junior, subsequently known as Mr. James Christy. Mr. Christy was succeeded by Mr. Edward Corder in 1883, Mr. Corder remaining in office until the Chelmsford Rural District Council was formed in January, 1895, under the Local Government Act of 1894, when he was appointed its first chairman, and continued in office until 1899. His successors were:—Mr. Richard James Algar, February, 1899 to April, 1902, Mr. George Henry Aubrey, April, 1902, to April, 1912, Mr. Henry Grant Madon Conybeare, April, 1912 to May, 1928, Mr. Geoffrey Matthews, May, 1928 to April, 1937. The present chairman, Mr. Arthur George Falkner, was appointed in April, 1937.

From 1872, until the present time, all meetings with the exception of two have been held during the daytime. The exceptions occurred in 1873, when the Authority of that day decided to hold its meetings at 6 p.m., but after one experience it was unanimously decided to revert to daytime meetings.

The first Clerk to the Authority formed in 1872 was Mr. W. W. Duffield, who continued in office until 1907. His successors were:—Mr. A. S. Duffield, 1907 to January, 1930, when the present Clerk, Mr. H. H. Gowers, was appointed with Mr. C. R. Pluntree as his Deputy.

In 1873, Chelmsford Maldon and Billericay Rural Sanitary Authorities agreed to appoint a whole-time Medical Officer of Health to serve the three Districts. Dr. C. B. Fox was appointed and continued in office until Billericay, in 1879, withdrew from the combination. The appointment of a Medical Officer of Health was not made compulsory until the Public Health Act, 1875, was passed. In 1879, Chelmsford and Maldon Rural Sanitary Authorities appointed Dr. A. H. Downes as whole-time Officer to serve the two Districts. He continued in office

until 1889, when he was appointed Medical Inspector to the Local Government Board and was subsequently knighted.

In 1889 he was succeeded by Dr. J. C. Thresh, who continued in office until 1895, when he was appointed County Medical Officer of Health for Essex, but allowed to continue to act for Chelmsford and Maldon areas. This arrangement continued until 1914, when your present Medical Officer of Health (Dr. J. F. Macdonald) was appointed, but a new combination was formed consisting of Chelmsford, Maldon and Rochford Rural Districts.

The first Sanitary Inspector (then known as Inspector of Nuisances) was Mr. A. F. Ginn who was appointed in 1873, and he also acted as Highway Surveyor. He continued in office until 1890, when he was succeeded by Mr. I. C. Smith, whose duties included those of Sanitary Surveyor. In 1899, his successor, Mr. J. Dewhirst was appointed, and a separate appointment was made for the post of Highway Surveyor. Mr. Dewhirst was succeeded by Mr. T. T. Thomas in 1930, and the latter was succeeded in 1941, by the present Water Engineer and Surveyor, Mr. W. E. B. Bunker. During 1900, the post of Sanitary Inspector became detached from that of Sanitary Surveyor, and Mr. W. Edser, who was assistant to Mr. Dewhirst, was appointed to the separate post. In 1920, a second Sanitary Inspector was appointed (Mr. B. G. Ellis), and the District divided into two areas. Mr. Ellis continued in office until 1923, and was followed by your present Chief Sanitary Inspector, Mr. A. Denton Ogden, who took charge of the southern half of the District. When Mr. Edser resigned in 1924, owing to ill health, Mr. Ogden was appointed Chief Sanitary Inspector for the whole District.

In 1930, Mr. M. W. Butcher was appointed Financial Officer to the Council. Prior to that date this appointment was combined with that of the Clerk to the Council.

Early in 1939, an Estates Management Department was formed under Mr. E. Ollott.

**OFFICE ACCOMMODATION.** Prior to 1913 the staff was dispersed in a number of rented offices in Chelmsford. In that year, the erection of central offices in Waterloo Lane, Chelmsford, to house all whole time officers, was completed.

Owing to the added duties imposed upon the Council, the staff had to be increased from time to time, and soon the Waterloo Lane offices proved inadequate.

In 1938, the present excellent offices with a Council Chamber were completed, at a cost of £20,643.

### Vital Statistics.

The first census taken was in 1801. The following table gives the populations at that and each subsequent census. The decline in the population in 1911, compared with that of 1901, was due to the transfer in 1907 to the Borough of Chelmsford of an area of 831 acres with a population of 3,408.

In 1801 the population was 14,990.

„ 1811	„	„	17,510.
„ 1821	„	„	19,943.
„ 1831	„	„	21,742.
„ 1841	„	„	23,814.
„ 1851	„	„	23,449.
„ 1861	„	„	22,458.
„ 1871	„	„	24,454.
„ 1881	„	„	23,037.
„ 1891	„	„	23,174.
„ 1901	„	„	23,717.
„ 1911	„	„	22,791.
„ 1921	„	„	24,616.
„ 1931	„	„	28,641.

The present estimated population is 35,190.

From the above table it is seen that the population has shown a gradual increase, with the exception of slight falls at each of the census of 1851, 1861, 1881 and 1911. Birth rates are available as far back as 1881, and the following table sets them out in periods. This table shows that during the years 1881-1890, the birth rate was 28 per thousand of population and then it gradually declined until the average during the years 1921-1930 was less than half—namely, 13.1. During the next ten years, 1931—1940, it showed a slight increase, and for the period 1941—1946, a further increase to 17.4. The birth rate for the year 1946, was 19.7 per thousand population,

## VITAL STATISTICS FOR THE PERIOD 1881-1946.

Period	Average Number of Births and Deaths per 1,000 of Population		Average Number of Deaths of Infants under 1 year per 1,000 Births
	Birth Rate	DeathRate	Infantile Mortality
1881-1890	28.0	15.3	92
1891-1900	24.1	14.7	96
1901-1910	22.8	13.3	80
1911-1920	20.7	12.6	64
1921-1930	13.1	11.0	43
1931-1940	15.1	11.7	39
1941-1946	17.4	11.1	32

The death rates since 1881, show a steady decrease. During the period 1881—1890, it was 15.3 per thousand of the population, declining gradually until now it is 11.1. The effect of a declining birth rate is an increase in the proportion of older persons in the population, for example, the percentage of persons in—

1881 over 65 years of age was 6 per cent.

1921        „        „        „        „        8    „    „

1931        „        „        „        „        9    „    „

With regard to the behaviour of certain specific diseases, detailed lists of causes of death are not given for the earlier years but particulars of deaths from heart disease and cancer are available. In the period 1881-1890, there were 399 deaths from heart disease, though from 1911-1920, there was a considerable decrease when 305 deaths were recorded from the disease. From 1921-1930, the figure had risen to 441, and during the period 1931-1940 the disease reached its highest total when 761 deaths were recorded, an increase of 52 per cent on the period 1881-1890. From 1941-1946, the figure was 543. In the period 1871-1880, there were 274 deaths attributed to cancer. During the following ten years it was responsible for 355 deaths, whilst during the past five years the number was 404. Since better facilities, such as the use of X-rays, have been available for diagnosing the disease, the number of deaths attributed to the disease has increased.

### Infectious Diseases.

With regard to infectious diseases, although the notification of infectious disease was not compulsory until the passing of the Public Health (Notification of Infectious Diseases) Act, 1890, there are details available from the year 1871. The following table gives particulars of deaths from infectious diseases from 1871 to 1946. The number of deaths from Scarlet Fever, Whooping Cough, and Measles have shown a considerable decrease in the past sixty-five years, a position no doubt largely due to the considerable interest shown by the public with regard to health matters. A most significant decrease is also shown with regard to Tuberculosis. This is shown in the following table.

NUMBER OF DEATHS FROM CERTAIN DISEASES IN PAST YEARS

Period	Scarlet Fever	Diphtheria	Typhoid Fever	Pulmonary Tuberculosis	Other Tubercular Diseases	Puerperal Fever	Measles	Whooping Cough	Influenza	Cancer	Heart Disease
1871-1880	—	84	—	—	—	—	—	—	—	274	—
1881-1890	19	71	39	275	127	8	40	123	—	355	399
1891-1900	10	58	49	—	—	—	37	54	—	448	—
1901-1910	15	32	8	198	66	2	16	48	57	235	361
1911-1920	8	14	2	157	42	4	12	26	106	282	305
1921-1930	3	7	2	158	38	4	2	22	78	415	441
1931-1940	4	6	2	113	33	4	6	4	68	519	761
1941-1946	Nil	Nil	Nil	50	10	1	6	4	37	404	543

A number of minor epidemics of **Typhoid Fever** occurred from time to time and were mainly attributed to the polluted water supplies. The number of deaths from Typhoid Fever during the period 1881-1890 was 39. During the period 1891-1900, the position worsened when 49 deaths were recorded. In the next period, 1901-1910, the number of deaths declined to 8. Since 1910, a period of 36 years, only six deaths resulted from the disease. Diphtheria, as seen from the above table, shows a steady reduction in the toll of deaths from this disease. The co-operation of parents and Health Authorities, coupled with increased facilities for combating the disease, have proved to be vital factors in the decrease.

Influenza in epidemic form appeared in the District from time to time, and during 1911-1920, there were 106 deaths from the disease, 58 of these occurring during the 1918 epidemic.

In that year the outbreak was not confined to this District alone but was pandemic.

Since 1881, smallpox has appeared in the District on ten occasions, the most recent being in 1931 when 7 cases occurred amongst caravan dwellers. Until 1884, patients were nursed in their own homes, but in that year a tent was purchased and used for isolating cases of smallpox.

The following table gives various infectious diseases notified from 1892 until 1946.

	Scarlet Fever	Diphtheria	Enteric Fever	Puerperal Fever	Pulmonary Tuberculosis	Other forms of Tuberculosis
1892-1900	643	508	131	—	—	—
1901-1910	627	457	46	6	198	66
1911-1920	316	164	14	4	271	48
1921-1930	495	182	19	9	204	63
1931-1940	690	110	12	39	169	90
1941-1946	206	23	2	16	146	84

From the two previous tables it will be noted that the proportion of deaths is not high in relation to the number of cases notified, and both figures show a steady decline.

### **Hospital Accommodation for Infectious Diseases.**

The earliest Isolation Hospital, which consisted of a tent, was first utilised in 1889. This accommodation was mainly used for Smallpox cases and was erected in a field in the parish in which the case or cases occurred. The first permanent Isolation Hospital was erected in 1893, on the site of the present Hospital, and consisted of a single block with two wards, each of which could accommodate five patients. For cases in excess of this number, it was the practice to erect tents. The hospital served the Rural District but in 1902 the Borough of Chelmsford made application to join the scheme, and in that year the present Joint Hospital Board was formed to serve the two Districts. From time to time extensions were made to the hospital buildings.

### Water Supplies of the District.

In 1872 the water supply throughout the District was obtained mainly from private shallow wells, streams, ponds, springs, and rainwater. The first proposal to provide a piped water supply for any parish was in 1873, when it was decided to utilise water from springs at Ingatestone and Fryerning to supply that parish. These works were completed in 1879, and were augmented in 1900 by a ten inch deep bored tube. Plans for a piped water supply for parts of the parishes of Great Baddow, Springfield, and Widford were approved and the works were completed in 1881. The supply was obtained from springs, but in 1900 had to be augmented by a supply from a deep well. A piped water supply was provided from springs for Danbury in 1891, and this supply was extended to the parishes of Little Baddow, East Hanningfield, Rettendon, Runwell, Sandon, and Woodham Ferrers. Prior to 1890, Writtle village obtained its water supply from a standpipe owned by the Writtle Brewery Company. In 1902 a deep bored tube well was constructed to provide a piped water supply to the village of Writtle. Prior to 1914, Broomfield village depended mainly for its domestic water supply upon private shallow wells. In that year the present waterworks consisting of a deep bored tube with the necessary distributing mains were completed.

Minor public water supplies were provided in 1885 for the village of Little Waltham, and in 1889 for Great Waltham village, by means of standpipes, the supply being from springs. In other parishes public pumps were provided.

In 1885 a survey of the water supplies throughout the District was made, when it was estimated that—

4 per cent. of the population obtained their water supply from ponds.										
3	„	„	„	„	„	„	„	„	„	streams
1	„	„	„	„	„	„	„	„	„	rainwater.
50	„	„	„	„	„	„	„	„	„	springs.
38	„	„	„	„	„	„	„	„	„	shallow wells.
4	„	„	„	„	„	„	„	„	„	artesian wells.

As to the quality of the supplies, it was estimated that :—  
42 per cent were of good standard.

14 „ „ useable.

18 „ „ unsafe.

26 „ „ dangerously polluted.

During 1933, the Council decided to take advantage of the trunk mains of the South Essex Waterworks Company passing through the District. The scheme consisted of reserving 500,000 gallons per day from the Company, and extending the Council's mains to supply the populous area of all the parishes. This involved the laying of approximately 100 miles of new mains,

and was completed in 1939. Together with the previous mains owned by the Council, this made a total length of 180 miles. Further extensions have since taken place, until, at the end of 1946, of every five houses in the District, 4 have a piped supply available. For this purpose a further 500,000 gallons per day have been reserved from the Company, making a total daily reservation of one million gallons. As a result of these reservations, the District Council has ceased to supply from their own waterworks, with the exception of those at Broomfield. Eventually these will be closed, although the water is of excellent quality; to retain them, however, it would be necessary to overhaul the pumping machinery, and this the Ministry of Health will not sanction owing to the cost involved.

In addition to the statutory right of obtaining water from the South Essex Waterworks Company, there is a further statutory right vested in the District Council to obtain water from the Borough of Chelmsford and the Southend Waterworks Company. The latter Company has statutory rights to supply property over a small area which was transferred to the District under the County Review.

During 1946, a pond near the school at Ford End was reported to be so polluted that it was becoming a serious nuisance, and it is interesting to note that in 1876 this pond was considered as a possible source of domestic supply for the village.

### **Drainage and Sewerage.**

Prior to 1879, there were no public sewers available in any part of the District but the highway drains were used by some of the inhabitants as sewers. In 1879, a sewerage scheme was completed for the populous area of Ingatestone and Fryerning. These sewers have been extended from time to time, and the sewage is discharged at the sewage works where it is treated by broad irrigation and the effluent flows into the River Wid. Sewage from the populous area of Mountnessing is also treated at these works, this scheme being completed in 1934.

In 1878, plans for a sewerage system for the populous areas of the villages of Great Baddow, Springfield and Widford were submitted to the Local Government Board. The purification of the sewage was to be by broad irrigation on land in the parish of Springfield. Subsequently the Borough of Chelmsford joined in with this scheme and a Joint Sewerage Committee of the two Authorities was formed. The scheme was completed in 1881.

In 1905, a sewerage system with local purification works for the village of Writtle was completed. In 1928, by agreement with the Borough of Chelmsford, the local works were discontinued and since then the sewage has entered the Borough sewers and discharged at the Joint Sewage Works in Springfield.

In 1928, Broomfield village was provided with sewers. These discharged into those of the Borough through which the sewage is drained to the Joint Works at Springfield.

The village of Great Waltham is sewered, and the sewage is conveyed to settling tanks before discharge into the river, but in Little Waltham the road drains serve as sewers, and, at present, new sewers are under consideration to serve these two villages.

In 1937, the Runwell sewerage scheme was completed at a cost of over £196,000.

The remainder of the parishes in the District are without sewerage systems. The need for the provision of these was realised some years before the last war, and schemes were devised which, but for the outbreak of hostilities, would have been in operation to-day. The advantages and disadvantages of separate schemes for the individual parishes as against combined schemes for several parishes have been examined, and it has been decided to combine parishes for this purpose, guided by the levels and valley lines of the area, with the result that the following schemes have been decided upon.

Parishes covered by the Schemes	Method of Disposal.	Approximate lengths of Pipes required
Great Waltham & Little Waltham	To connect to the existing Broomfield sewers and thence to the works of the Joint Sewerage Committee.	5 miles
Ingatestone, Margaretting, Mountnessing & Stock (including an area in the Billericay U.D.C.	To a proposed disposal works sited near the River Wid at Margaretting Tye.	12 miles.
Great Baddow (including Galleywood), Little Baddow, Boreham, Danbury & Sandon.	To a proposed disposal works below Little Baddow the final effluent to discharge into the River Chelmer at a point below Rushes Lock.	35 miles.

It is anticipated that a commencement of at least part of these schemes will be possible when conditions permit. The total cost of the work, including the necessary pumping stations, etc., as given by pre-war estimates, amounts to no less than £250,000, but is likely to be greatly increased owing to the present cost of labour and materials. A Public Local Inquiry was held in 1946, in respect of the first mentioned scheme, and the Ministry of Health has approved the scheme in principle.

In addition to the above-mentioned schemes, preliminary work is in hand for the preparation of schemes of main drainage in the parishes of South Hanningfield (in conjunction with Billericay U.D.C.) Great Leighs, Roxwell, and Woodham Ferrers.

### **Public Cleansing.**

For a number of years the Council has undertaken the collection of household refuse in the more populous parishes, horse transport giving way to mechanical transport in 1934. Prior to the recent war, weekly collections by direct labour in the parishes of Great Baddow, Ingatestone and Fryerning, Writtle and Broomfield were enjoyed by nearly 3,000 householders, and in addition a contractor collected regularly in the parishes of Little Waltham, Mountnessing, Stock, Boreham, Danbury, and Roxwell from nearly 1,500 houses.

The war disorganised the public cleansing service, and the collections in most cases became less frequent. The collection of salvage became obligatory upon Local Authorities, and during the period 1939-1945, over 850 tons of wastepaper, together with many tons of metal, rubber, textiles and bones, and thousands of bottles and jars, have been disposed of by the Council and the £5,550 thus obtained has covered the cost of the scheme and the profits have gone towards the relief of the rates. Almost as much again has been disposed of by the Council's contractor and by private collection schemes.

In 1946 the Council approved a comprehensive refuse collection scheme which will give a weekly or fortnightly collection to over 90 per cent. of the houses in the District. The operation of this scheme is continually being postponed owing to the delayed delivery of the necessary new vehicles. All refuse collected is disposed of by "controlled tipping"—the Council having adopted this method in 1928.

### Inspection of Foods.

This is an important function of the local authority. Prior to the last war a number of private slaughter houses were operating in the area. During and since the war, central slaughtering has been in operation. In theory, such an arrangement is an improvement on a large number of private slaughter houses, but if it is to prove satisfactory in practice, better methods of transporting and handling the meat must be provided.

Since 1885, regular inspections have been carried out of dairies and cowsheds where milk is produced for sale. Prior to this date a register of these premises was kept by the Clerk of the Peace.

### Housing.

The condition of house property has improved considerably during recent years. A number of houses that were beyond repair have been condemned and demolished, and the following table sets them out in periods :—

In the period 1910-1920 there were				33	houses condemned			
„	„	„	1921-1930	„	„	117	„	„
„	„	„	1931-1940	„	„	172	„	„
„	„	„	1941-1946	„	„	33	„	„

For many years, especially in the outlying agricultural parishes, the number of houses erected year by year has not been sufficient to meet the requirement of the population, and the recent war has been instrumental in adding considerably to this problem. The number of houses erected in the District since 1901 is given in the table below :—

From 1901 to 1910 there were 633 houses erected in the District.

„	1911	„	1920	„	„	381	„	„	„	„	„
„	1921	„	1930	„	„	2051	„	„	„	„	„
„	1931	„	1940	„	„	2537	„	„	„	„	„
„	1941	„	„	„	„	141	„	„	„	„	„

In 1911, two Council cottages were erected in the parish of Ingatestone to house employees of the Council, and from time to time, under various acts, Council owned houses have been built until, in 1946, the Council owned 1039 houses. Details of the various schemes under which these were built are given in the Report.

With regard to post-war housing, the position is extremely acute, owing to the shortage of labour and materials, but some progress is being made in this direction, and at the end of 1946,

there were 12 permanent houses and 70 temporary prefabricated bungalows erected and 247 Government huts adapted for living accommodation.

A Rural Housing Survey was completed in 1946, and a total of 7,365 properties under £20 rateable value were inspected. The purpose of the Survey was to decide a programme of housing improvements to be carried out over a number of years. Further details are given in the Report.

It is the opinion of housewives that the main essentials regarding housing, are first, good accommodation, second, a piped water supply inside the house, and third, electricity. The latter is placed before main drainage in rural areas.

I have outlined the past, what of the future?

My own view is that there will be increased communal health services, but authorities may have to guard against the danger of diminishing unduly, the responsibilities of the individual citizen.









